

**ARCHITECTURE DEPARTMENT**

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DESIGN REPORT



**BRIDGING THE COMMUNITY**

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## 1.1 Acknowledgement

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## 1.2 Prologue

This is a city of no future.  
This is a city of no history.  
This is a city of no present.

You want to know how high you can build.  
You want to know the G.F.A of the plan.  
You want to know what can be exempted.  
You want to know the efficiency.  
You want to know how long you can get the profits returned.  
You just don't want to know about the design.

Draw lines on the map and you call this is urbanization.  
Stick, plane and block and you call this is tectonic.  
Have a 1:1 model and you call this is technic.  
Blow fish this and blow fish that and you call this is habitation.

Form does not matter.  
Space does not matter.  
Structure does not matter.  
People does not matter.  
Oh sorry, this is the other studio's concerns!!

Architecture is nothing without people using it.  
Architecture is nothing without cherishing the community.  
Architecture is nothing without context.  
Architecture is nothing without history.

Oh my goodness, a first honorary student.  
Yes, I am envy and I do not think I can get that because :  
I do what I want to do.  
I do not do what you tell me to do.  
I do not kiss anybody's ass.  
I am sorry.

Call me incompetent. I do not care.  
Give me a C-: I do not care.  
Label me as bad student. I do not care.  
Say I am weird. I do not care.  
Laugh at me. I do not care.

For just one thing:  
I HAVE NO REGRET.





## 2.1 Design Theory

### 2.1.1 Abstract

One of the most cherished achievement or myth to be fulfilled in contemporary architecture is the dream of creating a healthy community. Long since after the Second World War, urban sociologists like Peter Willmott and Michael Young had done an extensive research on patterns and human behavior affecting the nature and the formation of community[1]. My thesis is to reinterpret an existing aged community by the redesigning of a new responsive housing typology which can fit in the existing context, both urbanistic and cultural. One main aim is to through the intervention to establish a sustainable and healthy community in which everybody knows everybody else and neighborhood keep in touch. No new architecture can arise without modifying what already exists.

### 2.1.2 Introduction

Many people has said, in designing a community, architecture has little to do with it. I do not suppose architecture can solve all the problems in the world but I do suppose architecture has in many ways influence the way we live. Architecture, unlike engineering which is very scientific, has in many ways to do with the humanity side of the world. Architecture is a branch of social science, that means, we do have a responsibility in helping to shape a better environment for living through the physical being of a building. A housing project is easy to design as long as you provide the necessary space for a living. The tough part is to design a housing where people can have their own identity and also the fostering of a good neighborhood tie. My thesis project wish to investigate what quality of space can help the formation a sustainable community and the interaction between neighborhood. The paper first will examine the role of architecture in the designing of a community and the meaning of living. Then it will go into the importance of a neighborhood relationship in human society. Lastly the paper will focus on the development of the thesis project from site, concept and the realization process.





### 2.1.3. A house is a machine for living in?

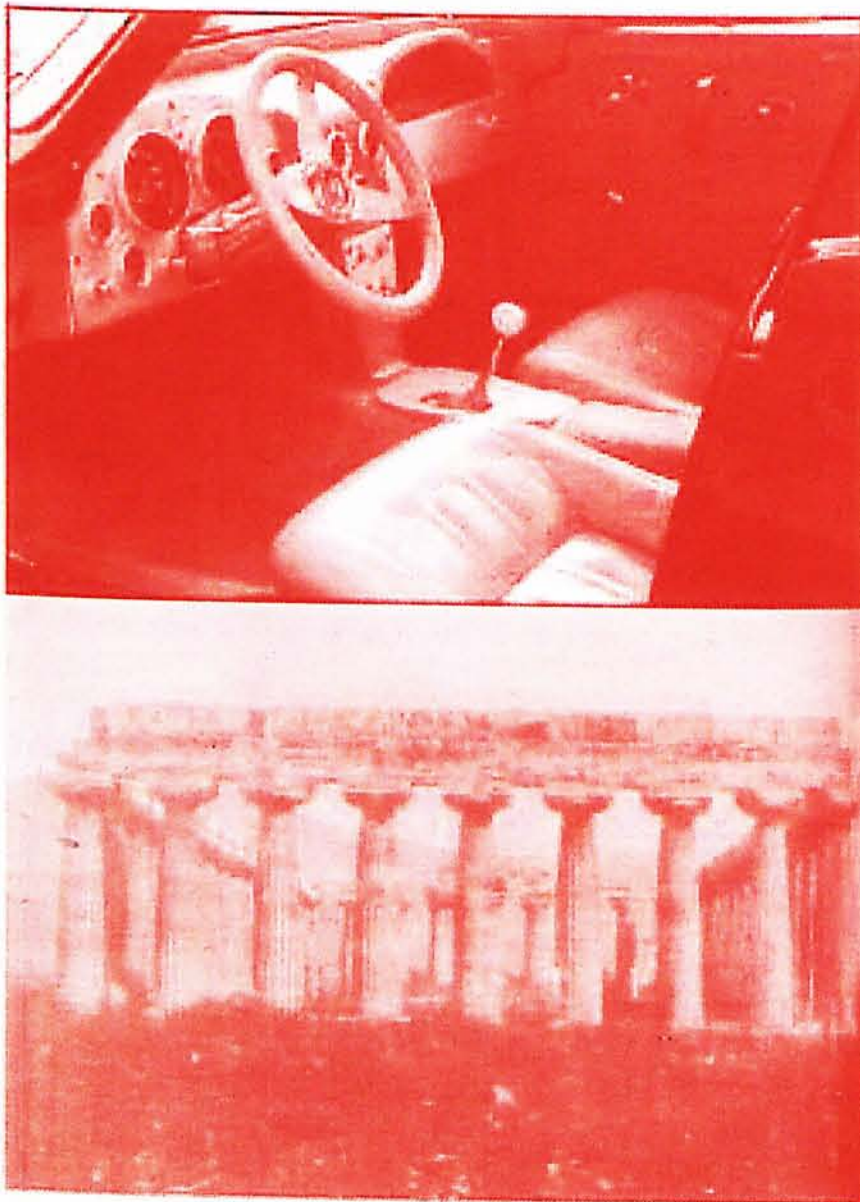
In the introduction of the book *Towards a New Architecture*, Frederick Etchells has quoted the operating theatre to be *the most perfect rooms in the world* in regard to its *elimination of the detrimental and the unessential*[2]. This view has strongly disturbed me. The design of such an operating theatre owes its need to its single purposed function and hygiene-related. Indeed and of course there is nothing nonessential. There is also the reason why it has a cold and inhumane feeling. One cannot simply compare a room for living to such a functional setting. Living comprises of many aspects of life, both physical and spiritual. To make a room purely functional in terms of space is an oversight on many intangible aspects and the touches of life.

Le Corbusier in his book proposed *A house is a machine for living* it[3] based on what he referred as engineer's aesthetic. He had made tremendous effort to convince the fellow readers that what is the perfect combination of form and function in automobiles, airplanes and ocean liners should be directly applied to the design of architecture. His argument is purely based from the perspective of economy factor. He has also oversimplified the role of architecture by making an analogy between architecture which are very much social compared to the pure functional machinery. It is very much of a rigid ideology and a unitary process.

His idea actually stemmed from Richard Lethaby's analogy of a bicycle and a simple house that in which he said *we must aim at getting the small house as perfect as the bicycle*[4]. Le Corbusier's argument combines succinctly the pathetic fallacies we are investigating: that particular types of architectural form are morally regenerative and physically health-giving is very much in doubt to me. It is quite absurd to transfer the principles of human morality into inanimate objects. In fact, Le Corbusier had fallen victim into his self-delusionary vision when he designed Villa Savoye for his clients. Human being can never become a *tabula rasa*[5], that a modern man or a new animal without roots in the past. In fact, Herbert Read in *Art and Industry* has argued that Le Corbusier's argument would only be substantial until we have *stripped it of all the irrelevancies imposed on it by a particular culture or civilization, can we see any solution to the problem*.[6]

Mass production houses indeed have its merits. With this method of production, it is able to shorten construction time and maintain a higher quality standard. However, the drawback lies on the humanity side of architecture. Hong Kong is a 'good' example to illustrate this phenomenon. Forty storeys high residential buildings, identical in floor plan and identical in blocks soaring up in any new towns you can name. The building itself is monotonic, storey after storey without any identity and non-site specific. They are designed, as Le Corbusier proposed, to the maximum





efficiency, without any efforts put in the creation of a community. Architecture is not a commercial entity like automobiles, it is especially in the design of house, about lifestyle. One should not overlook that it is the people or habitants, not the form that give meaning to architecture. The reason that Rolls Royce is the most luxurious limousine is that they are hand and tailored made to suit the need of different individuals. Rolls Royce is not mass produced.

We all tend to have an exaggeratedly technical idea of technique or technology which marks out the productive aspects of the project. We also tend to overshadow technology as a transformational guide, specific to architectural design. Design does not depend on technology, besides, there are never, nor have there ever been direct connections: technology is no longer a rational model of production. As proposed by Gregotti in *Inside Architecture*, he believed that *if there is a clear enemy to fight today, it is represented by the idea of an economic and technical space indifferent in all directions* it seems to have gone a long way beyond the logic of profit to the point where it casts its ideological shadow over the best intention of [architecture]. [7]

Le Corbusier had made reference to Greek and classical architecture to machinery by saying that they are the perfect setting and selection of standards which come into play with each other. Although the production of machinery works very much the same way, however its underlying principles are very much different. The classical architecture processes an organic unity that machines lack. It is the transforming of materials into architectural facts as compared to the assembling of parts in machinery design. In fact Greek and Gothic architecture had gone beyond this mechanistic theory. Those architecture were inspired by the pure need to fulfill humanis needs. Besides, the production of manufactured goods proceeds through successive refinements of the same genre of product. Architecture is each time difference and should be expressed through a unique field condition and a particular objective, on a different site and cultural contexts and patterns which vary from place to place.

If architecture is like engineering which can be predicted from a set of equation to determine the form, then every architecture should look like the same. Then I would propose a prison cell is the greatest architecture that has ever been designed. A six by nine foot cell with only the minimum necessities, a bed, a desk and a urinal should fit Le Corbusier well enough. What I like to emphasis is the need to put human into context. As I have mentioned earlier, there are so many intangible aspects of life that architecture should cater for, and the most important of all is the nurturing of a healthy and sustainable community.





#### 2.1.4 What is Architecture?

Architecture can influence the way we feel, sometimes helping us along as we go about our lives, and sometimes sabotaging our habitual ways of doing things. It is always more than a mere building, *representing as it does a folding together of buildings and culture*[8], so that the buildings come to have meaning as they are caught up in a way of life. Architecture is best appreciated as part of an art of living.

At a practical level, we do not expect the same things of all architecture at all times. In fact, the word 'architecture' encompasses more than one agenda that we have for buildings. On the one hand we want most buildings to be comfortable and reassuring but on the other hand we give consent to the architects who design spectacular buildings against all odds. They are eye-catching and graphically amazing and many architectural students like us aspire. However, the real architecture should help to make the world more habitable.

As mentioned before, architecture is part of the art of living. It is most successful when it is able to give expression to the life that inhabits it. We feel more at home in places that seem to give expression to the values we care about. There is art in the arrangement of buildings and art also in the life that they enable and that they frame. Our feelings can be influenced by the form of a building and dwellings are caught up with our lives that shelter our most intimate moments. In comparison to engineering, architecture is far more complex, with many interacting forces at work on it. The problems in architecture cannot be solved technically or by a set of equations, because there are simply too many interdependent variables that must be solved simultaneously.

There are things in architecture that become habitual we call them patterns. However, this is not to say that architecture cannot have certain sorts of simplicity in form, but the appearance of building is only one of the ways in which building can have an impact on the life within, and it is the least important way. The architecture that is studied in school, for the most part, is exciting, creative and heroic. The architecture which most of the society wants most of the time is, by contrast, familiar, reassuring and comfortable to be in and be near.





### 2.1.5 The Role of Architecture

*The origin of architecture does not reside in the primitive hut but rather in a primordial making of ground in order to delineate a human world against the void of nature*[9]. The task of architecture is therefore to organize the conflicts of a situation by functioning it as a critical instrument for examining what already exists. Architecture is not a freestanding objects, in fact, architectural form is the primary agent capable of contributing to the ever-evolving character of both land use and human activities. Some may argue that architecture cannot solve all the problems in the world. It is true to a certain extent but with an oversight to the impact of architecture on the humanity side. Alvaro Siza had once said, *architects do not invent anything, they transform reality*[10].

On a contextual basis, therefore, we should actively acknowledge the existing situations and patterns so that their essences remain readable and traceable without any over-simplicity and unnecessary homogeneity that modernism assumes. If architecture cannot call or remind people about its own root of living and their cultural value, all the architecture in the world would be pure juxtaposition of tectonic elements without any coherent meaning. It is detrimental to do architecture without making reference to the genius loci of the site and the specific cultural context of the place. If that is the case, then there would be no reason to worry about *the future existence of the value that we bring into being through the construction of architecture*. [11]

I am in myself quite suspicious of those architectural critics and architects who isolate themselves from the specific environmental and social context of an architectural project. We have seen so many magazines portraying exotic photographs of the magical form of a building. What we have few seen are photographs showing its context with the surrounding environment and existing fabrics. Nor seldom do we see photographs showing an occupied and inhabited building with end-users. This unilateral report has demonstrated mass favor on focusing on the appearance or the form of a building rather than its contents or its relationship to humanity and the city as a whole. People tend to view architecture as a sculpture or a commercial merchandise that is consumable. What we should do instead is to seek to understand and modify the specific situations that confront theory within the site, while simultaneously engaging in the specialized activities of construction through a grounded relationship with its own traditions. Only with such a perspective that can enable us not only constructing critical ideas, but also dismantling built work in order to generate alternative concepts, concepts that stem purely from the site and habitants' needs.





Some people say we are in a time of information era and that we are wise enough and technologically advanced enough to put historic and cultural context aside to address the real problems of architecture. This is especially obvious in the case of those sustainability advocates who experimented with themselves building with techno-popular imagery and cramped with state of the art gadgets. Clearly in Hong Kong, we have masses of housing with the same non-site specific typology overfilling the new towns. We cannot possibly in this international style image to distinguish our city with Central Manhattan which is thousands of miles apart from us. We should not put the blame of globalization. The true fact lies in our deprivation of nostalgia to our place and our own cultural roots, if there really exists any in architects' mind, I doubt. If to coin a name to the style of post-colonial architecture in Hong Kong, it is very much a non-style purely driven by market force.

This market driven force has led us into a homogenization of architectural culture, and *is a kind of hypermodernism that resists any alternative representation*[12]. The recent trend of green architecture seems to address the problem of human life and community, however, based on the same market mechanism and the developer sole aim of exempting more gross floor area to increase profits, it is only a matter of time before these experiments are doomed to failure. Besides, the attention that is devoted to technical issue has up to now, has more to do with ideology than with any meaningful contribution to the exact content of architecture.



### 2.1.6 Environment, Meaning and Communication

This section aims to establish a connection between the built environment and its meaning towards the human behavior. By proving it to be true, then we can also postulate the fact that architecture does have an influence in the formation of a community and a healthy public neighborhood.

People react to the environment in terms of the meanings the environments have for them. One might say that *environmental evaluation, then, is more a matter of affective response than of a detailed analysis of specific aspects, it is more a matter of latent than of manifest function, and it is largely affected by images and ideals*. [13] In fact, people do react to environments globally and affectively before they analyze them and evaluate them in more specific terms. People like or dislike certain areas because of what they mean. The initial affective and global response governs the direction that subsequent interactions with the environment will take. And these responses are based on the meaning that environments and particular aspects of them have for people.

Meaning also gains in importance when it is realized that the concept of function which is so important in the modern movement, goes far beyond purely instrumental or manifest functions. Meaning is thus not something apart from function, but is itself a most important aspect of function. In fact, the meaning aspects of the environment are critical so that the physical built environment is used in the presentation of self and in establishing identity.

One point we as architects should note that the designers and users are very different in their reactions to environments and their preferences and so on. It is the users' meaning that is important, not architects' or critics'; it is the meaning of everyday environments, not famous buildings. This brings us back to the point that we should design according to the real need of people by observing their behavior and patterns towards a certain built environment. Yet, in spite of the apparent importance of meaning and particularly users' meaning, it is obvious, if not fair to say that the meaning aspect of the environment has often been neglected by architects in the recent years, while it seems to me they spend most of their energy in coining themselves with certain 'cool' architectural doctrines.

There are two types of meaning carried by the environment, one is the perceptual aspect, the other is the associational aspect. [14] Architects tend to react to environments in perceptual terms which are their actual meaning whereas the general public react to environment in associational terms. One example can be seen in the designing of Bank of China by I.M. Pei. The architectural profession view the white band on the facade as the structural element (its real meaning), however when it was evaluated in associational







terms by the public, who saw the white frame as big cross, that is, as having a negative associations.

The meaning of many environments is generated through personalization ñ through taking procession, completing it and changing it. From that point of view the meaning designed may be inappropriate, particularly if it is a single meaning. What is wrong is that we architects always tend to over-design buildings and other environments without leaving room for personalization by the general public. It is important in terms of the ability of users to communicate particular meanings through personalization, by using objects and other environmental elements in order to transform environments so that they might communicate different meanings particular to various individuals and groups. In a more simpler terms, it should give them freedom for display of identity.

Two things seem clear from the above. First, that much of the meaning has to do with personalization and hence perceived control, with decoration, with movable elements rather than with architectural elements. Second, that architects generally have tended to be opposed strongly to this concept in fact, the whole modern movement in architecture can be seen as an attack on users' meaning ñ the attack in ornaments and on decoration. This argument can be applied with even greater strength to housing, where users' meaning is clearly much more central and where the affective component generally be expected to be much more significant. *In the case of housing, giving meaning becomes particularly important because of the emotional, personal and symbolic connotation of the house and the primacy of these aspects in shaping its form as well as the important of psycho-social consequences of the house.* [15] Rapoport has shown by above arguments the importance of the possibility of making changes. It should be noted that these changes are not only referring to the flexibility at the level of instrumental functions but rather at the level of expressions. Kowloon Walled City is thus an example when people has decided to bridge over the instrumental flexibility by the adding on of illegal structures on the façade as a kind of expression and a display of self identity. To me, I consider this haphazard add on feature to be the most humanness and liveliness of façade design, truly based on the need of different individuals.





### 2.1.7 Public Neighborhoods and Community

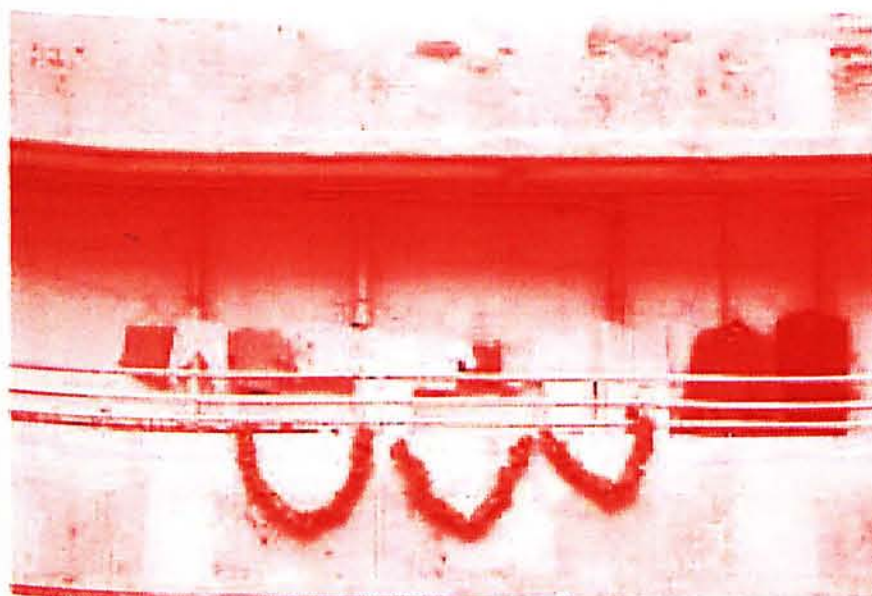
A public housing project is more than a system of subsidized homes; it is a public neighborhood. Strangely enough, in a society like Hong Kong whose root can be traced back to traditional Chinese culture that cherishes family ties and neighborhood relationship, the majority of us still tend to think of residential areas as bastions of compartmentalized privacy where community engagement is very limited. It is time to forget about all those architectural dogmas, which focus on the manipulation of form and space without even knowing the most basic need of human as being. It is time to free ourselves from space making to place making. It is time to ask ourselves whether we want a simple machine or a stainless steel contortion or a place that give expression to the values we care about as our home. There is a urgent need to study and work at the scale of the neighborhood, to go deeply into public life and to observe the real need of people, it is as crucial as the need to comprehend the meaning and use of housing.

More than just conglomerations of units and families, neighborhoods carry many meanings and uses which are especially noticeable when communities are compared cross-culturally. In some nations, neighborhoods are natural extensions of home, with the public and private lives meshing and becoming almost one. In other nations, neighborhoods consist of houses separated by tree-lined streets through which dwellers drive cars into and out of two-car garages without having to leave the sanctuary of the auto or the home. What about the case of Hong Kong?

Hong Kong is famous for its hyper-dense development owing to its very limited area of land. Purely driven by economy and market force, most housing development in Hong Kong put their attention of deriving typology based on efficiency. Spaces aimed for neighborhood interaction is considered to be a waste. The fact is most interaction spaces have taken the form of luxurious clubhouse which is a separate building detached from the main development. To some, the making of a community is just a myth and we as architects have little to do with it. It is certain that the formation of a community is based on many social factors, but architecture does have a role in providing spaces of certain quality that can stimulate neighborhood interaction.

The architectural qualities is of particular importance in the design of a communal space. When people like to stay in a certain space, this condition also contributes to public life and communal sense. Space must have certain qualities concerning matters like human scale and nice atmosphere, although it is quite hard to define on absolute physical terms. What we can do is to observe the patterns people behave towards certain space of certain qualities. From these observed patterns, we can then derive a good quality place where people like to stay or communicate with each





other. However, we should note that this pattern is not universal, meaning, a set of pattern may not be suited to different places even if the people share the same cultural background. As a result, we should observe and abstract the loci of a specific site and derive a set of specific pattern before we begin to design the building. Anyhow, adequate spatial dimensions and use of colors can attribute to this quality of communal spaces. Another challenge is to see that the planned public spaces have facilities or certain qualities that suit a variety of behavior. In other words, it should be multi-functional. The communal space should be just another sitting out area where people can enjoy sunshine or breeze. It should also be a market place where people can meet purposefully. It should also be a playground for children, an exercising area for elderly or an open area where the community can hold any impromptu activities.

To conclude, even for neighboring, a situation in which it is relatively easy to meet, there is a need for a purpose before making contact. In other words, we assume that people are not inclined to commit themselves, except old people, unless they have a reason. Thus, the built environment should contain places where people can meet non-committedly.



## 2.2 Design Research

The title of my project is *Sustainable Community Living: reinterpretation of sense of neighborhood in established community*. The word sustainable carries a meaning that despite of changes in the demographic or living profile, the community is still maintained and will not deteriorate. Once it is established, the community will grow with the habitats. Community is in the sense that it is more than neighborhood within the living apartment, but it refers also to the linkage between the housing and the surrounding area. Since the housing project occupy an exiting site with old tenement building, I take the chance to reinterpret the pros and cons of the existing condition affecting by the building fabric onto the community as a whole. One point is clear that the new project is aimed to retain the pre-established community without making a new one. So to speak the objective of the thesis is to remodel and to improve the established community neighborhood through the redevelopment and the regeneration of this old residential area.

### 2.2.1 Research

The research focuses on the study of the communal areas of four housing estates built in the sixty, seventy, eighty and ninety. In fact, the research has shown that we have not learn much in the past to make a better living. It is better only in terms of living standard physically, but in a communal sense, it stills has a long way to go. There is also a trend that the communal area is becoming more delocalized, meaning its location moves further away from the central courtyard between blocks to landscaped garden far away. We can also observe that more and more communal activities have taken place in the centralized shopping mall, replacing the courtyard concept. We have in fact turned the concept of living into a concept of consumerism by using a shopping mall as the anchorage point of interaction between residents and neighborhood. The research has also shown that although there is a provision of facilities for different age group in some modern housing, however it is proved to be failure in bringing the community as a whole. One reason is that these facilities appear in pockets of spaces which are entirely separated from each other and is visually blocked by lines of trees. As a result, there is little chance for people of different age group to congregate together, given a certain purpose like exercise. A successful communal area, as mentioned before, should allow a mixed activities to take place in the same venue with visual connection, if not physical, to one another. So even some elderly may not be able to participate in some laboring activities.

I believe there is a more natural and human way of interaction within the housing block itself. For those who argue that we seldom interact with neighbors due to the complex nature of society nowadays is only because we



as architects do not provide space with the appropriate quality which can enhance such happening. In fact, in the study of Shek Kip Mei housing, there is a strong sense of community in the estate itself. I have observed four patterns: 1) central courtyard space 2) single loaded access 3) human scale 4) collective memory.

The courtyard is situated in between two estate blocks no more than five meters apart. Unlike any courtyard in modern housing, it does not have any facilities installed. All it has got is trees with large canopy giving shadow to the courtyard, and brick planters which also act as seating area. At first glance, the courtyard seems to be too ordinary to be attractive. In fact, many old people tend to congregate in the planter area. Because of the lack of predefined activities, people are free to do whatever they feel like to do. Some sit or sleep on the planter area and some residents of the ground floor area put chairs into the courtyard to chat and watch any passerby. People also play mahjong and card games under the tree canopy. The courtyard is so lively that it gives ambience to the surrounding area.

As in this example, what makes a courtyard so habitable does not depend on the hardware being installed, but very much depend on the surrounding area which plays a great role in inducing activities in the courtyard. Also the scale of the courtyard is more or less comparable to human scale that can give a sense of intimacy to the habitants. The courtyard itself is also seen as an extension of private domain by the residents of the ground floor, who tend to put their belongings, mostly furniture outside into the area so much so the boundary of both domains are meshed together, forming a homogenous whole.

One failure of modern courtyard in public housing is that the authority has put in too many hardware features that have restricted the area for other impromptu usages. It has also underestimate the need of residents to privatize the public space to certain degree in creation of their own activities area. By undesigning the courtyard, residents can then take up whatever form of activities they like without being afraid of violating the existing setting which predetermined the happening of only a limited number of activities.

Single loaded access can have a positive effect on the relationship of neighborhood. It also adds liveliness to the facade. The places where neighbors meet one another have bearings on the extent of social network as the regular use of common spaces over time can help to establish a sense of familiarity which would lead to informal social interactions. According to a research done by the housing department of Singapore, upto 49.2% of residents are likely to meet in the corridor.[16] The using of single loaded access has main advantages of a core access. Despite of a larger chance of public encounter, residents can, in the



case of Shek Kip Mei, also see and be seen on the activities of both the corridor and the courtyard. It can maintain a visual connection between the upper floor and the ground level. The single loaded access also provides a buffer zone, an intermediate area between the core and the door of the flat. People again can privatize the corridor to a certain extent which makes up the identity of the flat. This layout arrangement also have a positive effect in the environmental concern by making cross ventilation possible, which in modern core design lacks. Residents can also communicate with each other as they pass through each other's doors if privacy is not a main concern to the residents.

Human scale is also an important factor for a good communal area. Modern public housing which are 40 storeys does not have any human scale at all. When you look up the façade, all you can see is a repeating pattern without any sense of scale and identity. Although some may claim the provision of sky garden can enhance community tie but all these remain in a theoretical sense. I do doubt the feasibility of a garden which is hanged up so high in the sky, and there is little relationship between the activities in the garden and the activities on the ground, nor is there any visual link between the two. One should not be so naïve to think with the provision of a communal area, activities will then follow to happen. There are certain qualities to a place that determine whether people will feel easy and comfortable to use. With a space so high up from the ground without any surrounding context, I cannot imagine what kind of activities would actually take place there.

### 2.2.2 Reference:

- [1] Deyan Sudijic *The 100 Mile City* p.279 (Andre Deutsh Ltd. 1992)
- [2] Le Corbusier *Towards a New Architecture* p.xiv (Dover 1986)
- [3] *ibid* p.4
- [4] Richard Lethaby *Form in Civilization* p.33 (Oxford University Press 1953)
- [5] David Watkin *Morality & Architecture Revisited* p.48 (John Murray 2001)
- [6] Herbert Read *Art and Industry* (Horizon Press 1953)
- [7] Vittorio Gregotti *Inside Architecture* p.ix (MIT Press 1996)
- [8] Andrew Ballantyne *What is Architecture* (Routledge 2002)
- [9] Vittorio Gregotti *Inside Architecture* p.xvii (MIT Press 1996)
- [10] Alvaro Siza *Poetic Profession* (Rizzoli 1986)
- [11] Vittorio Gregotti *Inside Architecture* p.xvi (MIT Press 1996)
- [12] *ibid* p.xxi
- [13] Amos Rapoport *Human Aspects of Urban Form* p.60 (Pergamon Press 1977)
- [14] *ibid* ch.6
- [15] Amos Rapoport *House Form and Culture* p.300 (Prentice Hall 1969)
- [16] *Housing & Development Board Social Aspects of Public Housing in Singapore* (HDB 2000)



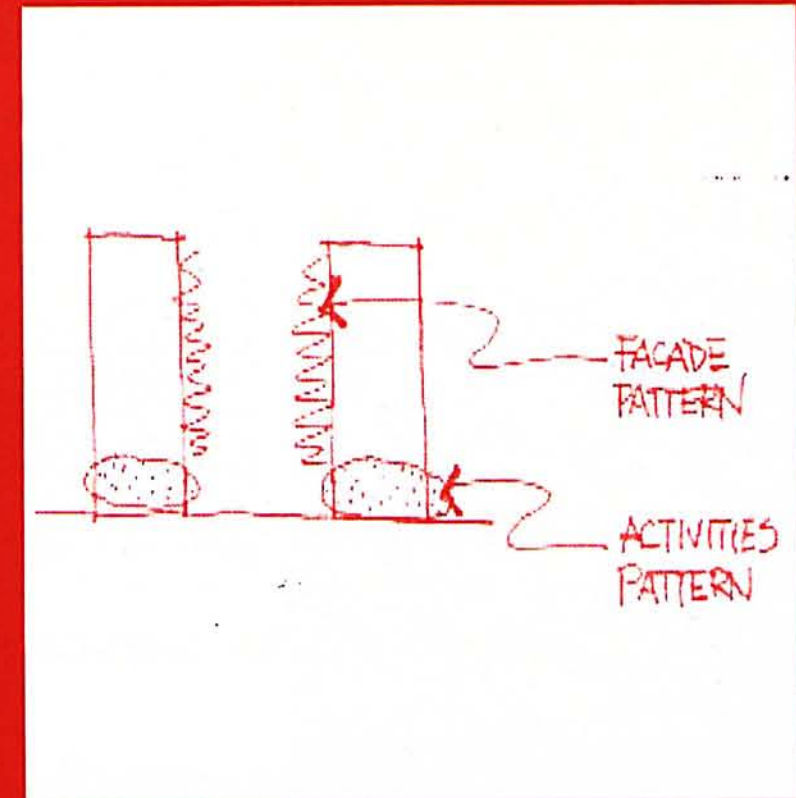
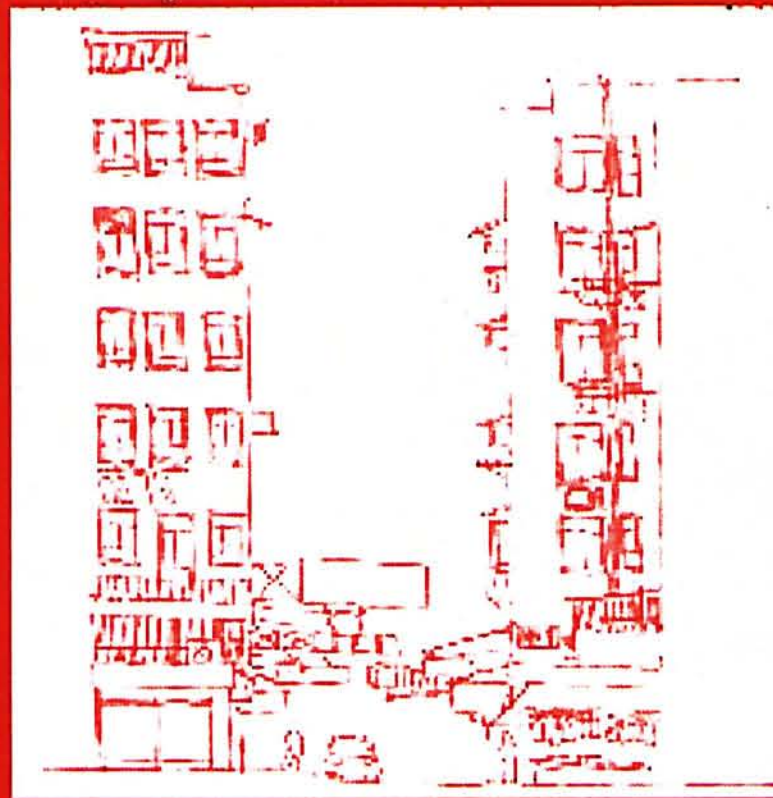
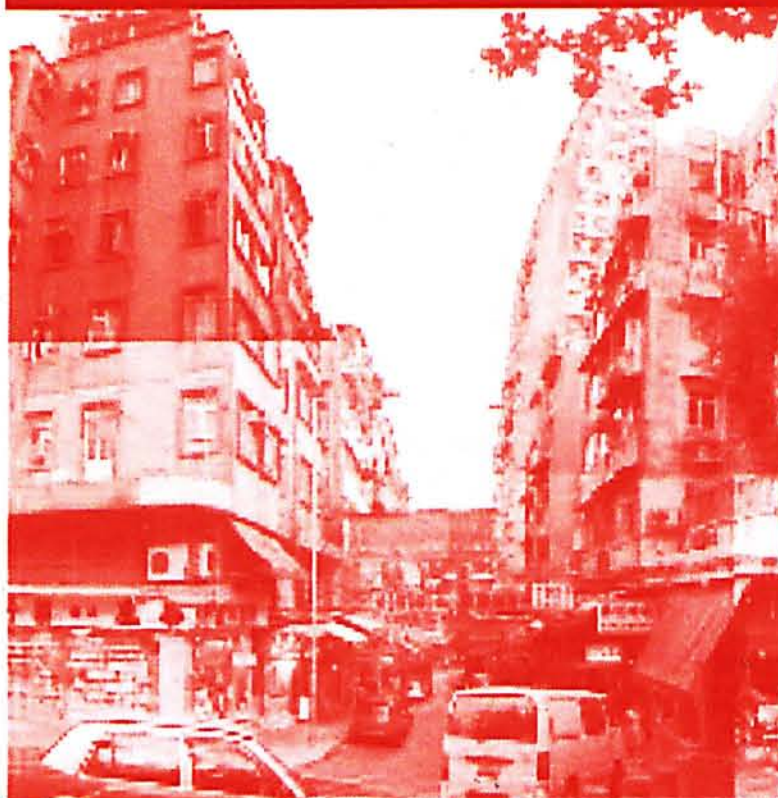
### 3.1 Site Analysis

The site of my thesis project is located in Wong Tai Sin. Wong Tai Sin is one of the oldest community in Hong Kong. The existing site consists of two rows of tenement building ranges from 3 to 7 storeys high and are of over 40 years of age. Surrounding the existing area, there is quite a number of public facilities. There are a church, a market, a social center, a sitting out garden and a larger park. However, there is a missing link between these facilities and the site, which means they have little connection with each other. The other characteristic of the site is the richness of street activities. All the ground floor areas consist of either shops and small restaurants. These activities have extended their business into the small alley within the site so the alley itself is canopied by the canvas extending from the adjoining building fabric. The major circulation path also runs through the alley which connects between the footbridge of the neighboring housing estate to the market.

Since the tenement blocks are built in different time and in a piecemeal fraction, they vary in building heights and façade treatments. These two factors have given variety and liveliness on the façade where each flat has its own identity when view outside. People also build extension or illegal structure on the façade, but doing so, it also avoids the monotonous façade that modern building presents. There is a back alley between the two rows of blocks which is occupied by electrical and mechanical device which is not presented with any activities due to its inhabitable quality.

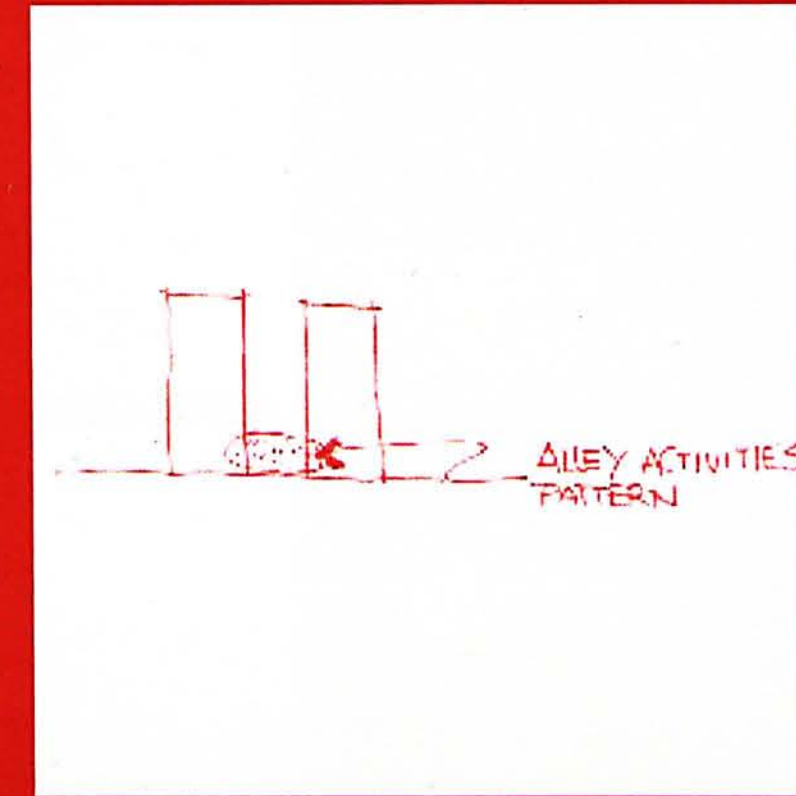
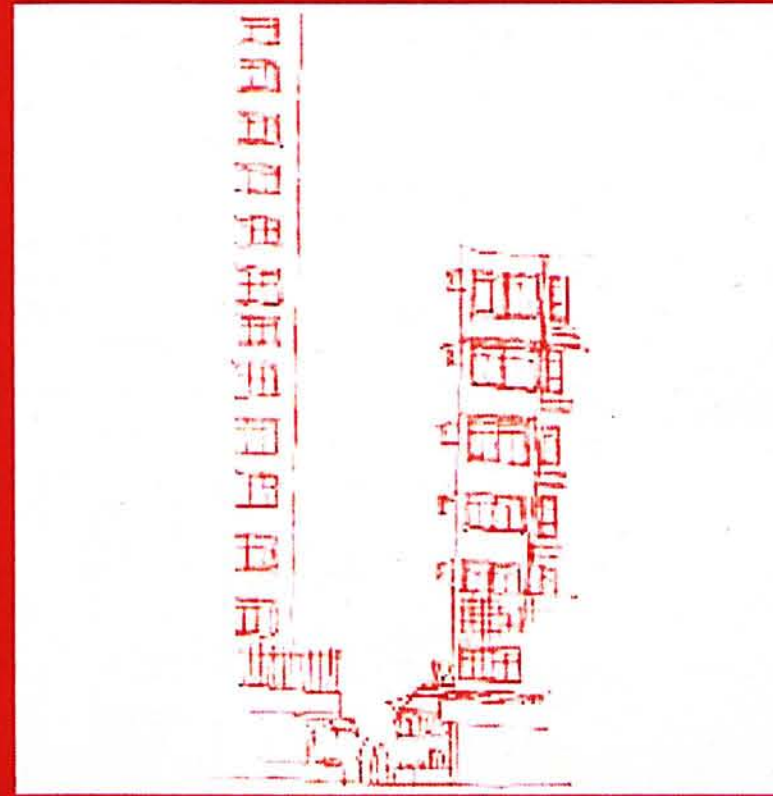
From the site analysis and my observation, I have generated certain patterns that act as the base of my design. These patterns, unlike a scientific equation, are a result of observation of human behavior with their surrounding context. They are so important to the design of my thesis because it shows exactly of the real need of the habitants and their daily activities pattern. All of these all real and with this, we can have an architecture that really answer and solve the need of the people and not a form contortion which ourselves as architects found only interesting and meaningful. As Paul K.Feyerabend had said, *“our cities where urban planners and architects can do and undo at will, without ever asking the inhabitants whether they like what might forever remain under their noses”*. The best architect that I have known work out their design on site, based their design on end-users and bearing the benefit of the community as prior, and not on the drawing board in their luxurious office overlooking a great sea view.





Above: An unplanned development purely stemmed from the needs and the desires of the end-users has resulted in a heterogenous design with different layers and patterns. The facades has displayed lives to the building in contrast with nowadays development with an autonomous and blankness facade design. The shops at ground level has act as the meeting or rendezvous point of the area. It also acted as the signature of that particular building.

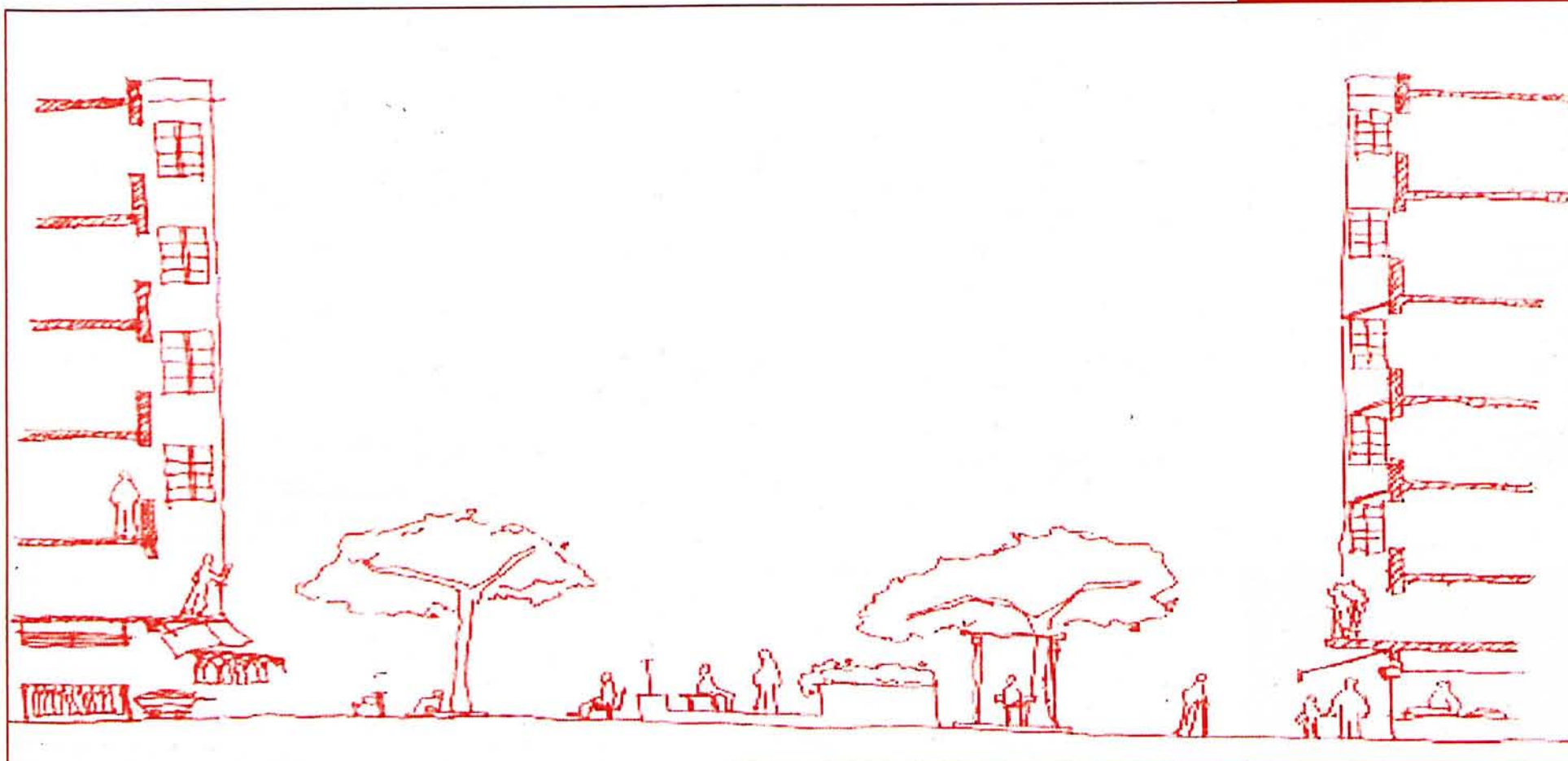
Below: The back alley or nullah is congested with human activities. It also served as the short cut between the housing estate to the market. The width of the alley provides a suitable human scale to the users in which people can feel intimate to the surrounding.



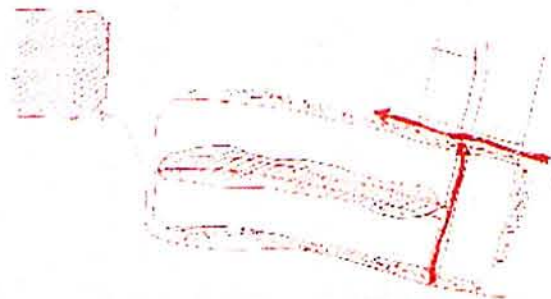




The sitting out area serves as a connecting point between the two blocks of building. It together with its adjacent two facades create a small plaza in the area. The shops has extended their activities space to the exterior, blurring the edges of the building. However, it lacks its relation to the public park 2 blocks away. It could be more desirable if these 2 parks can be connected together in some way.







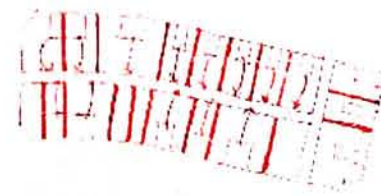
- pedestrian flow and activities pattern



- setback facade to extend alley into courtyard space
- open up ground level for continuous traffic flow and unobstructed visual vista



- self contained core circulation without neighborhood sense
- basic repetition of units (constricted stripe)



- moving out of circulation area to form loaded corridor

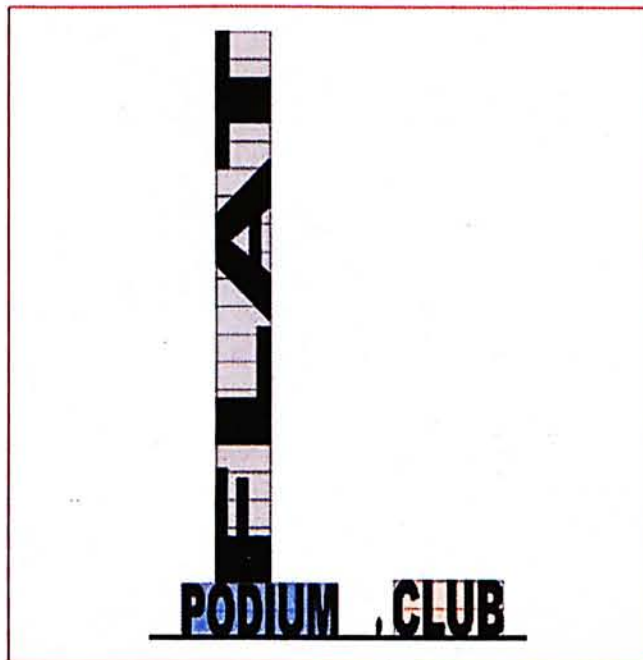
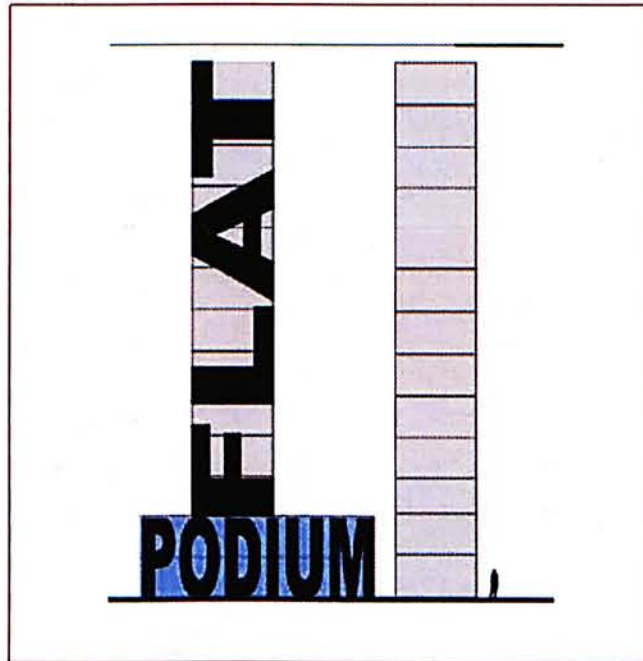
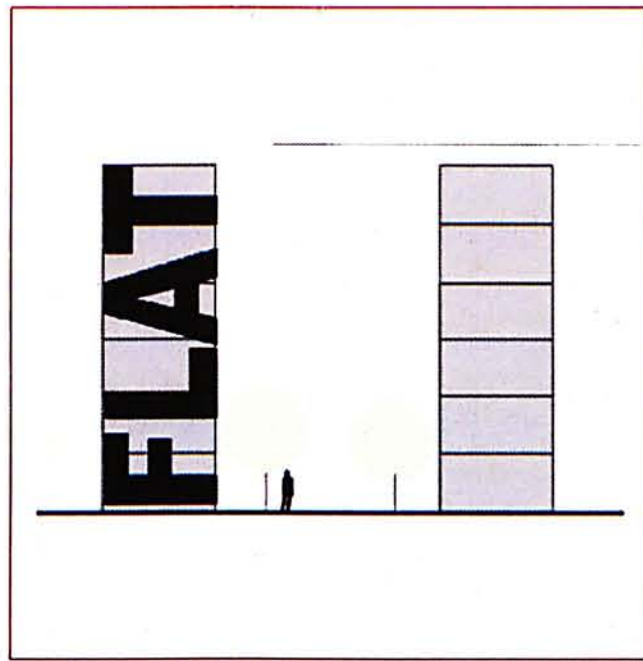


- intimacy of street scale
- human scale of public domain



- inversion of negative space
- extend of alley size into habitable space





### Typology I (7-storey building):

The central courtyard serves as the heart of the community. It has an intimate scale to the surrounding buildings. There is a direct visual contact between the single-loaded corridor to the courtyard.

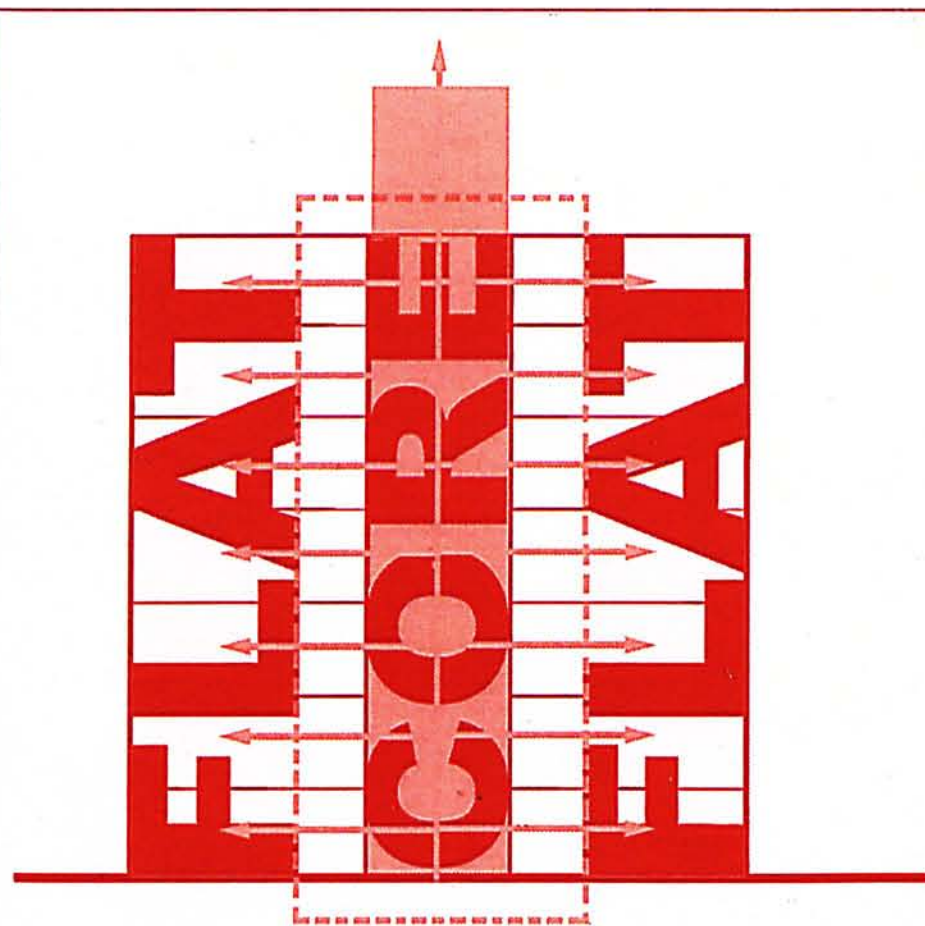
### Typology II (podium building):

With the introduction of the podium, the meeting place of the neighborhood has shifted to the commercial programmes situated at the podium level. Usually the podium is shared by the whole development, and it contains either a shopping mall or a carpark. In the shopping mall case, the sense of community is deteriorated on a consumerism basis.

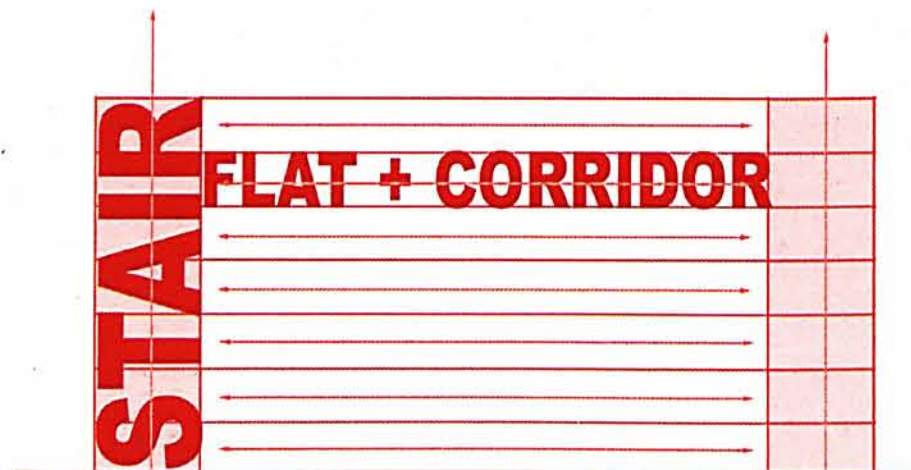
### Typology III (podium building + clubhouse):

For even larger development, or in some private luxurious development, a clubhouse is usually included. Though the facilities are well organized, the clubhouse is in most case a separate entity and is detached from the main development. It causes a segregation of activities.





**LOBBY**



In a typical central core access building, the life lobby serves as the only place where people have a chance to meet each other. However, most of the lift lobby are designed badly, with poor lighting and poor ventilation, it discourages people to stay any longer.

In a slab block building, either single-loaded or double-loaded, the corridor become the meeting point of the residents. However, this corridor is designed to have the minimum width as required by ordinance to increase the efficiency of the plan. It has sacrificed chance where people can utilize the space for communal activities and interaction.

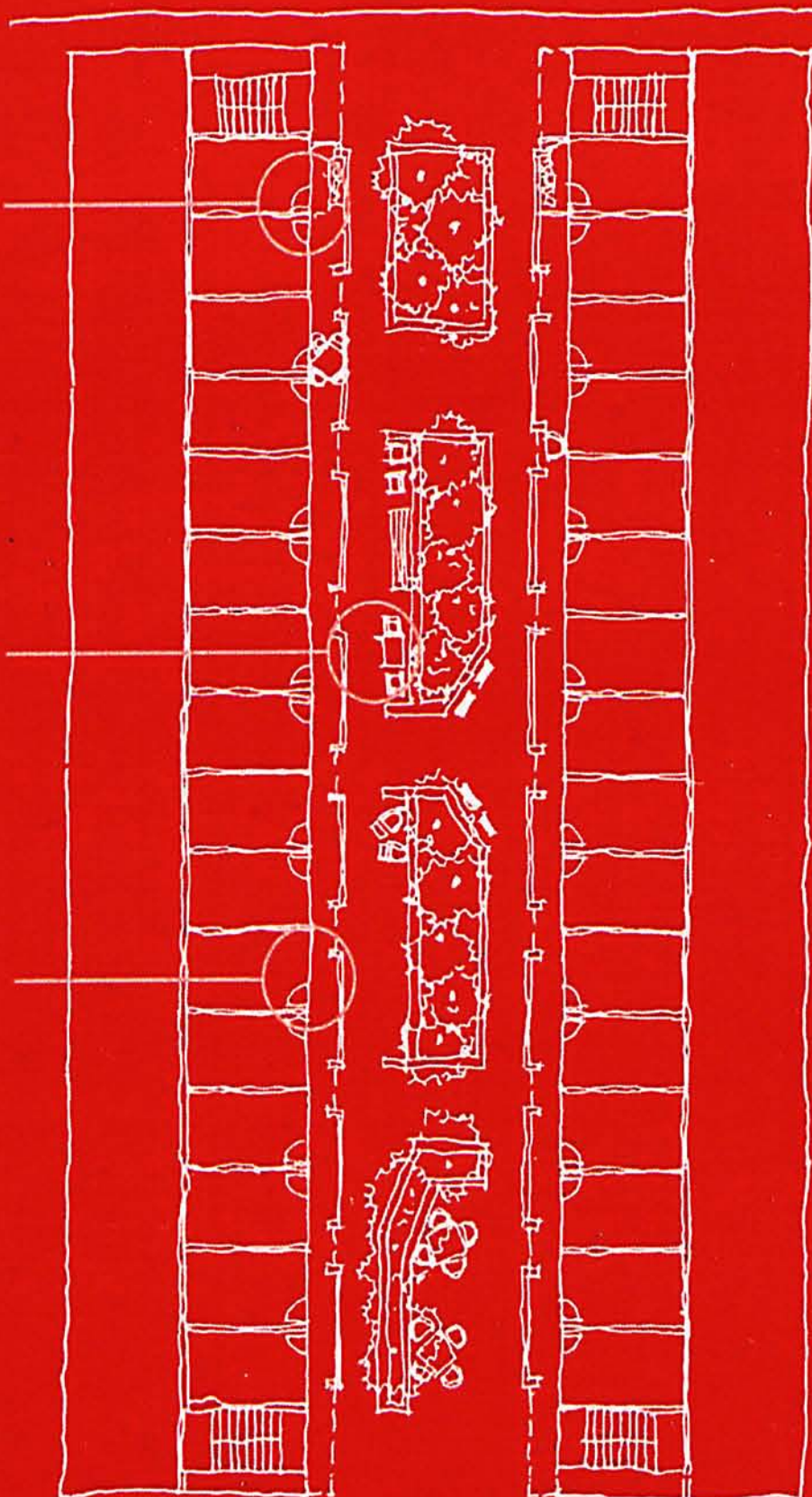


**- a need of interaction and communication  
among senior neighbours**

an extension of the private domain  
to the outdoor and create a semi-  
private zone for either storage or  
to carry out other activities like  
playing mahjong

people put seats and tables outside  
under the tree canopy, they can  
enjoy conversation and the coziness  
create a homelike environment

the single loaded corridor of the  
upper floors enhances interaction  
between neighbourhood as one  
walks across, one can also observe  
or enjoy the activities down in the  
courtyard along the corridor





- an attempt to foster community interaction by grouping facilities of different age group

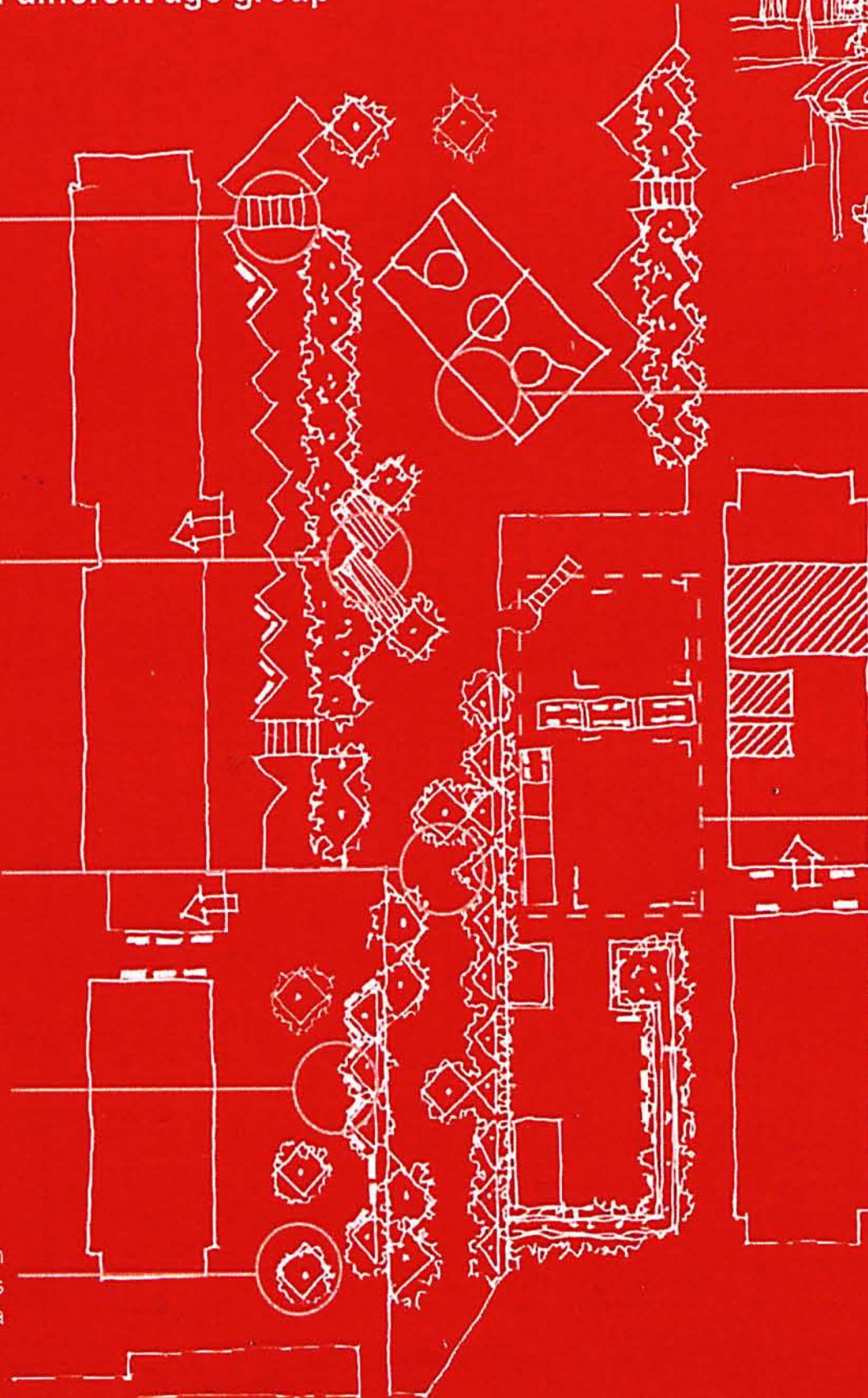
ramp should be added for the convenience of the elderly

there is very limited shading area along the concrete plinth if the shading area is extended people can have a view to the basketball game

most elderly prefer not to sit around here because of the dead end with no circulation flow and they cannot enjoy other people activities

the zigzag profile of the concrete plinth can act more liveliness to the place and provide a setting for the perpendicular alignment of the seats which is more convenient for conversation

the concrete plinth planter with shadowy tree canopy provides alternative seating area



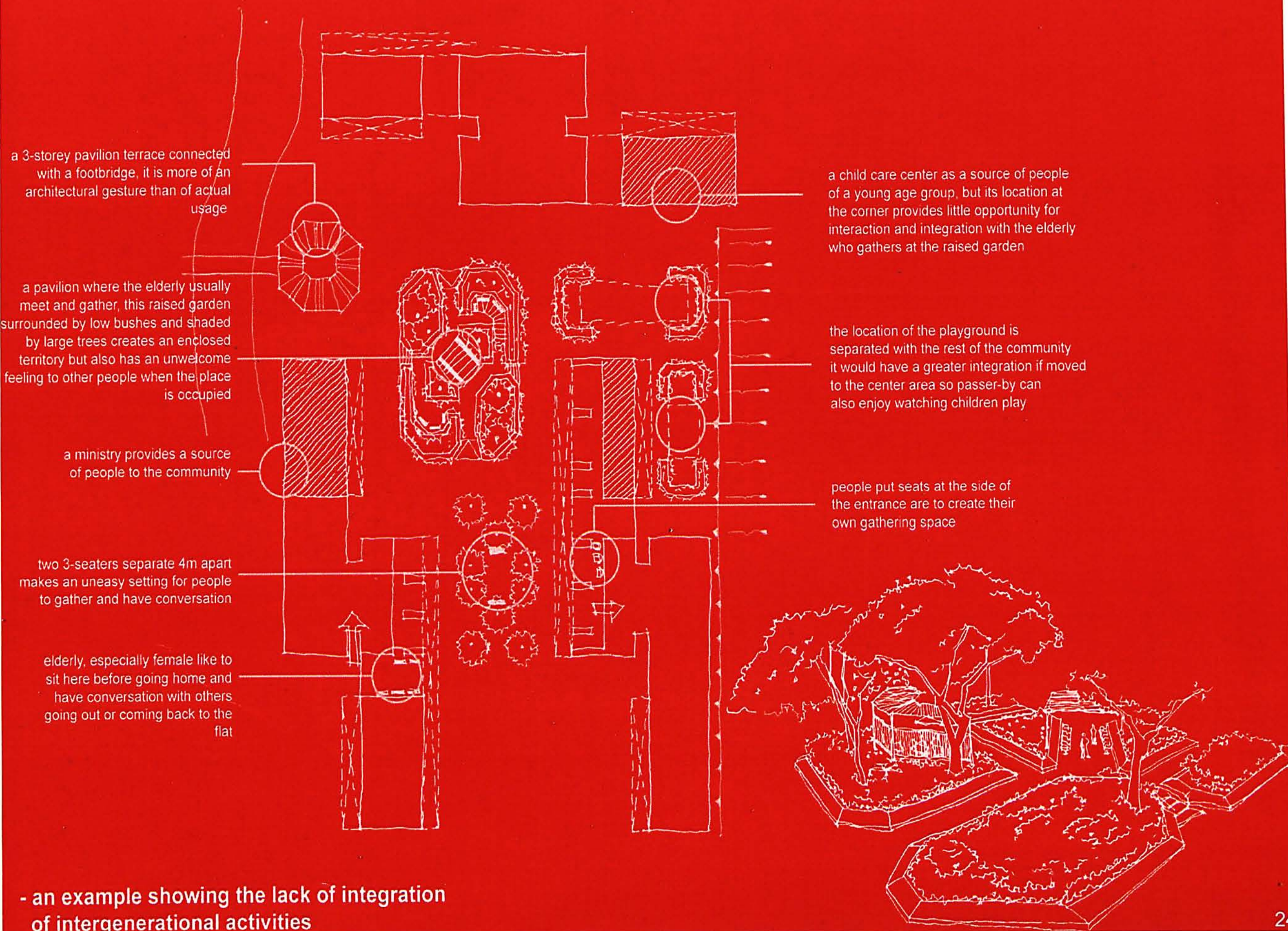
lack of seating area around the basketball court, although most elderly people cannot participate in vigorous sport game, but they enjoy watching other people play

an exercise area with playground for both kids and elderly so to offer a chance of interaction, it is also located along the circulation between the market and the flats



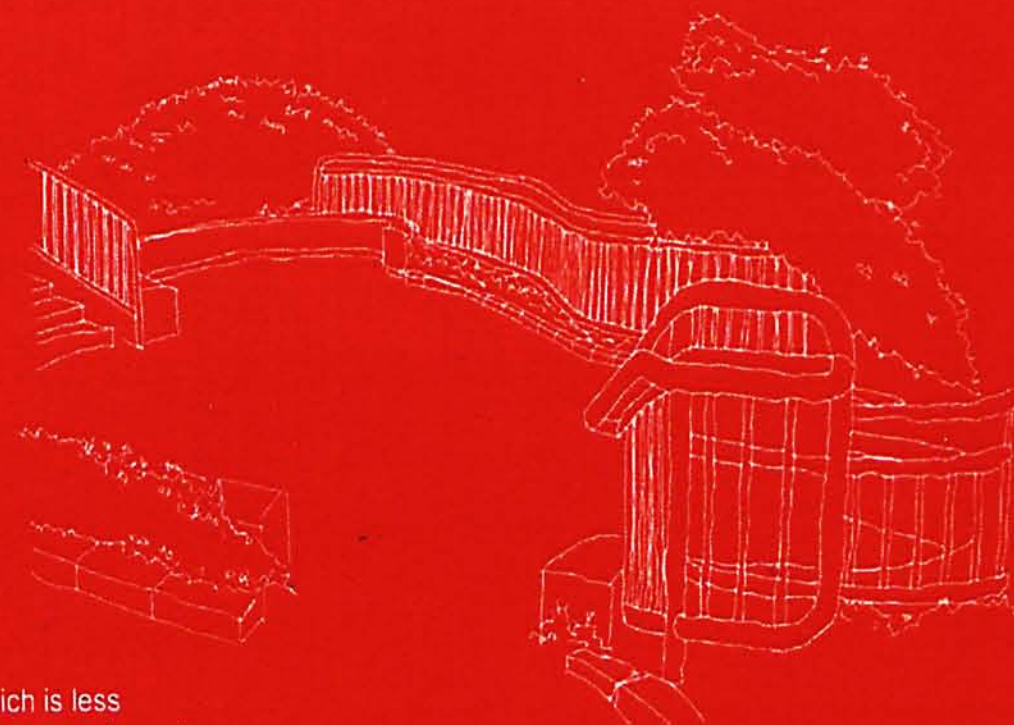
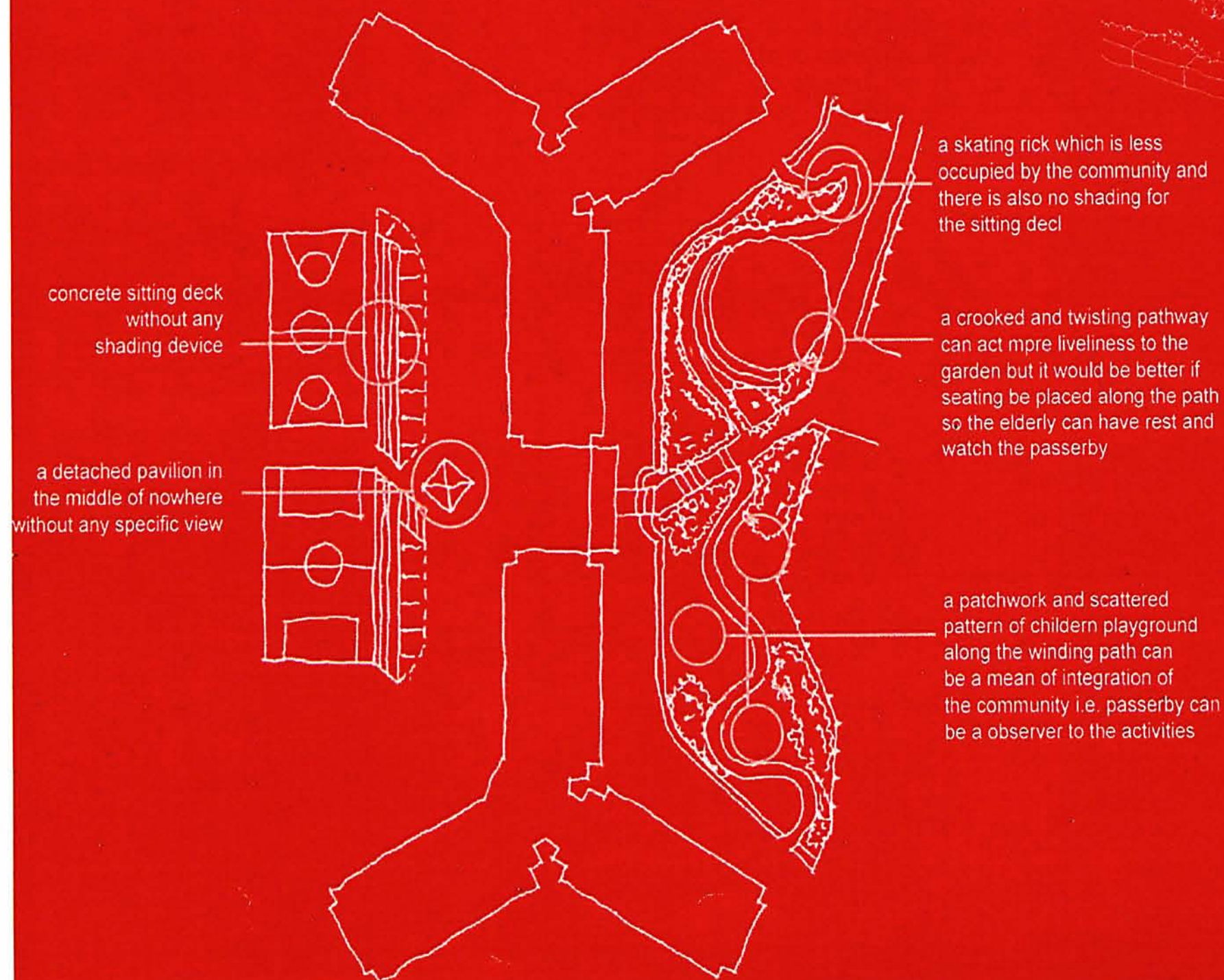
a pebble path for foot massage which can be used by people of different age group



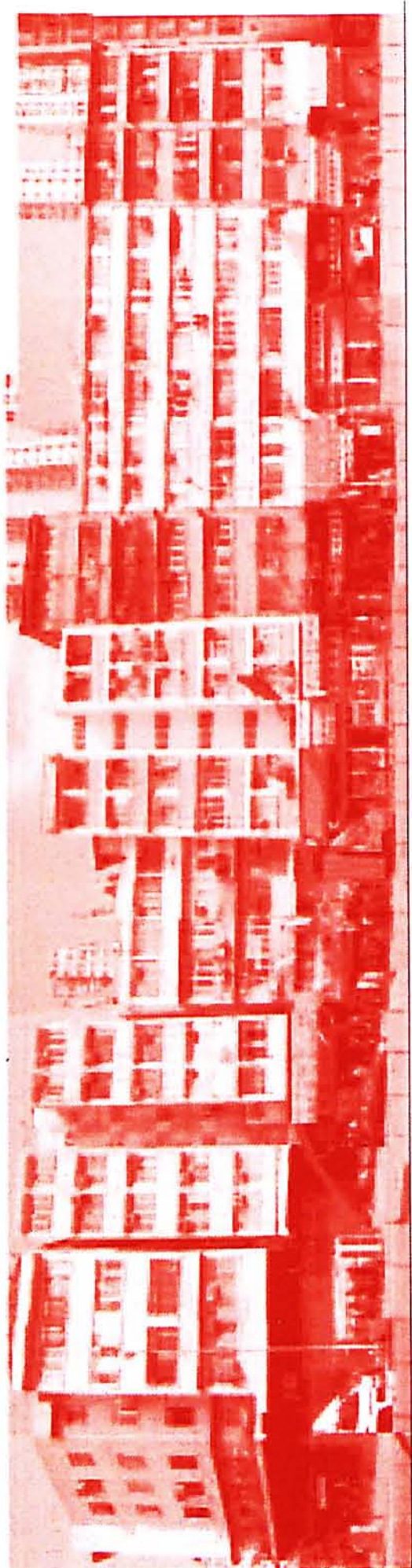




- the size of the neighborhood has a direct implication to the intimacy of the community
- the base of the community has shifted to the shopping center in the vicinity connected by a network of footbridge







### 3.3 Concept

The concept of my thesis is to generate the building form based on the existing site context and not by form making of tectonic space. There are mainly three aspects:

- 1) Remodel the back alley into a central courtyard space
- 2) Replace core access with single loaded access
- 3) Provision of elevated community domain

Since the presence of alley activities is so rich in the site, I want to retain this feature by modifying or regenerating the existing back alley. This is done by widen the alley so to bring in sunlight and gentle breeze in order to make it more habitable. The courtyard is also act as the anchor point of the whole estates in which people gather and communicate. The courtyard is surrounded by ground level shops which they can extend their activities into the courtyard. It is also filled up with two lines of small kiosk which can be run by the residents.

The courtyard also redirect pedestrian traffic by linking the footbridge and the market so to attract more passerby and enhance the sense of community as a whole. It also reestablish a link between the sitting out area in the north and the park in the south, so people are free to pass through the courtyard in access to these two areas. The courtyard, although is owned by the housing, but it is not fenced off to the outside world, so much so that the mixing of community is made possible.

The courtyard which is a public space itself is expected to stimulate public life and is considered as a meeting place for the community as a whole. It presupposes that it is possible to affect social contacts with the help of its spatial arrangement that people who under certain conditions will use this public space. There are certain qualities in the courtyard in which the public can watch each other unobtrusively and is appropriate to a variety of behavior. The existing core access method to the tenement block is replaced by a single loaded corridor access. As mentioned before, this type of access can act liveliness to the facade and establish visual connection between different floors. The corridor is faced inwards towards the central courtyard so residents can see the activities happening inside the courtyard.

In order to provide more privacy to the flat, the corridor is offset from the facade 1.5 meters and is linked to the flat with a 2 meters wide deck. The entrance deck provides an intermediate zone between the public corridor and the private flat and also an extension of the private domain. Residents are free or encouraged to privatize the deck with their belongings. They are given freedom to decorate this deck with their own wish to show the identity of the flat. Old people can also sit on the deck to chat or see the



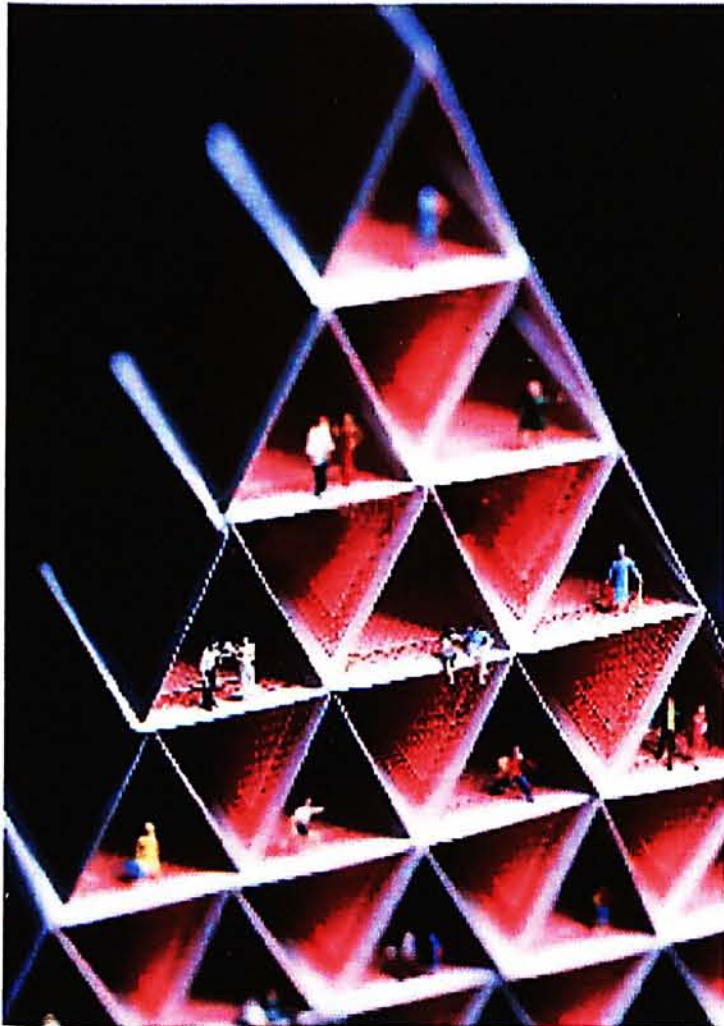
passing neighbors.

The elevated domain is a replacement of the sky garden. The sky garden concept is so favorable by architects because it do add a certain richness to the building blocks by making a void in a wall of building block. It is favorable by developer because it can be exempted from gross floor area, thus meaning more profit. However, the sky garden is prone to have many problems. One is the lack of contextual value. The other is the lack of human scale. The garden itself is surrounded with no other activities; only with greenery that are very much in doubt whether they can grow in such condition. Ground activities can barely be seen on such a height. Wind condition is unfavorable whereby it suffers from strong gust due to its height. It is to me such another refugee floor with greenery growing in non-natural habitat.

So I have derived the idea of elevated domain from the inversion of the negative space of the alley into a protected, habitable zone where certain activities can take place. The elevated domain is situated between the building blocks so it is protected from unfavorable wind but can be lit naturally by sunlight. They are bridged over between the building blocks in different floor level directly over the central courtyard. It can maintain a strong visual connection with the courtyard and also with the single-loaded corridor. On every elevated domain, there exists a roof garden that can be shown by sunlight. Real plants can be grown there and are able to accept rainwater. There are two forms of activities in this domain. One is defined and the other is undefined. The defined activities include a gymnasium, a café and a leisure room. The undefined area acts very much like a function room. It is only different in the sense that residents are welcomed to take over the space for any activities they wish from chatting to impromptu gathering. Again the non-predefined nature of this space allows freedom for residents to privatize is also a factor healthy for a sustainable neighborhood.

The housing development consists of mixed units of flat, ranging from single bedroom studio unit to four bedroom family unit. People can actually move from one type of unit to another corresponding to the growth of their family size without moving out from the established community. It also consists of a non-typical floor plan where each floor has a different layout. By this controlled randomness, it adds variety to the façade and thus identity to the residents. It can also retain the existing randomness pattern of the façade of the tenement blocks. It should be noted that what I want to propose is not an imitation of the existing but rather a translation of that loci into a new language that can befit in today's context. As Walter Benjamin has told us that even translation may fail to reproduce the precise significance of the earlier works, *it [nonetheless] assumes an afterlife of [earlier works]*





# A New Housing Typology

## - sustainable community living

march thesis 03-04 interim  
louis kth





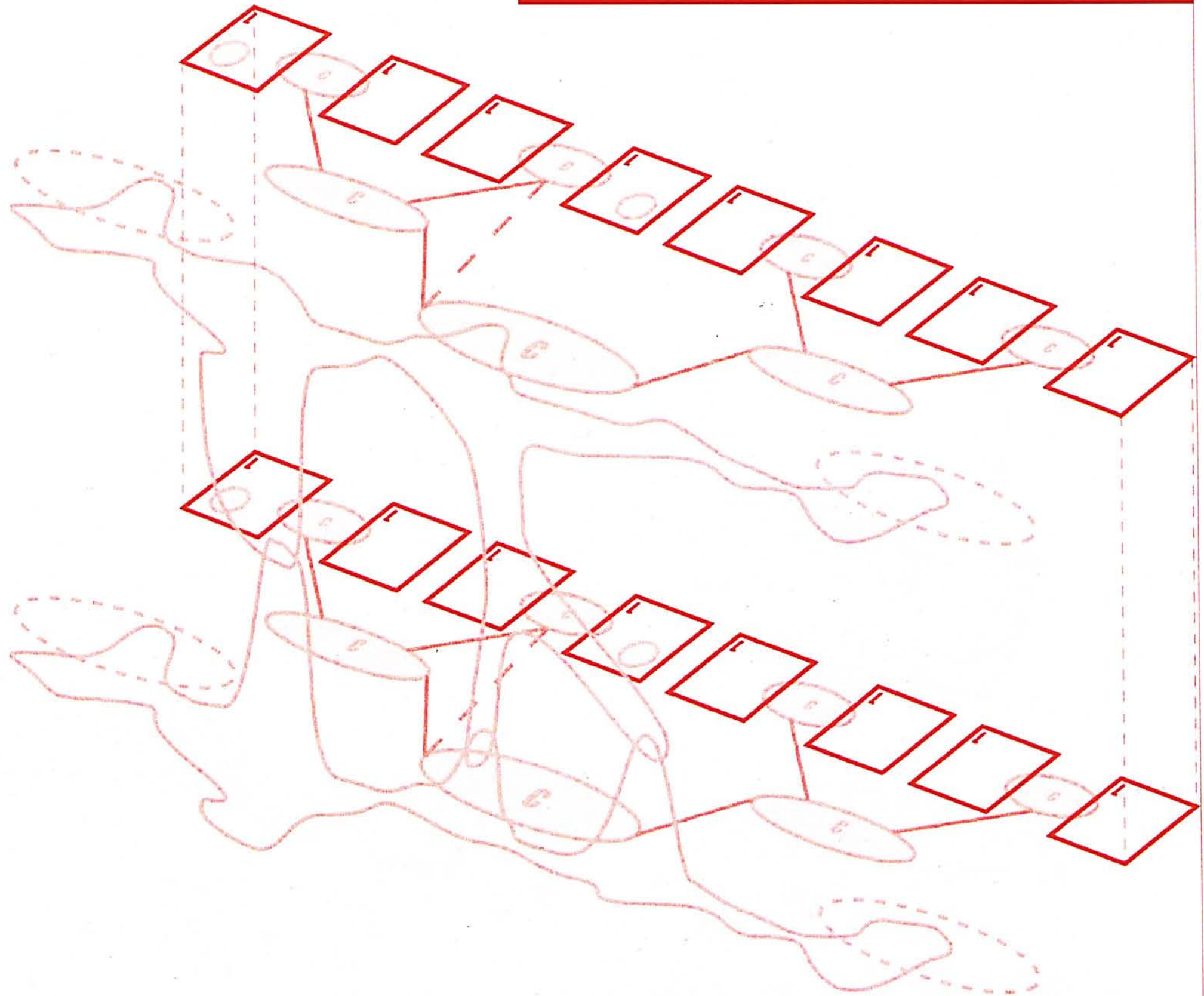
**(micro):**  
**between units**



**(meso):**  
**between floors**

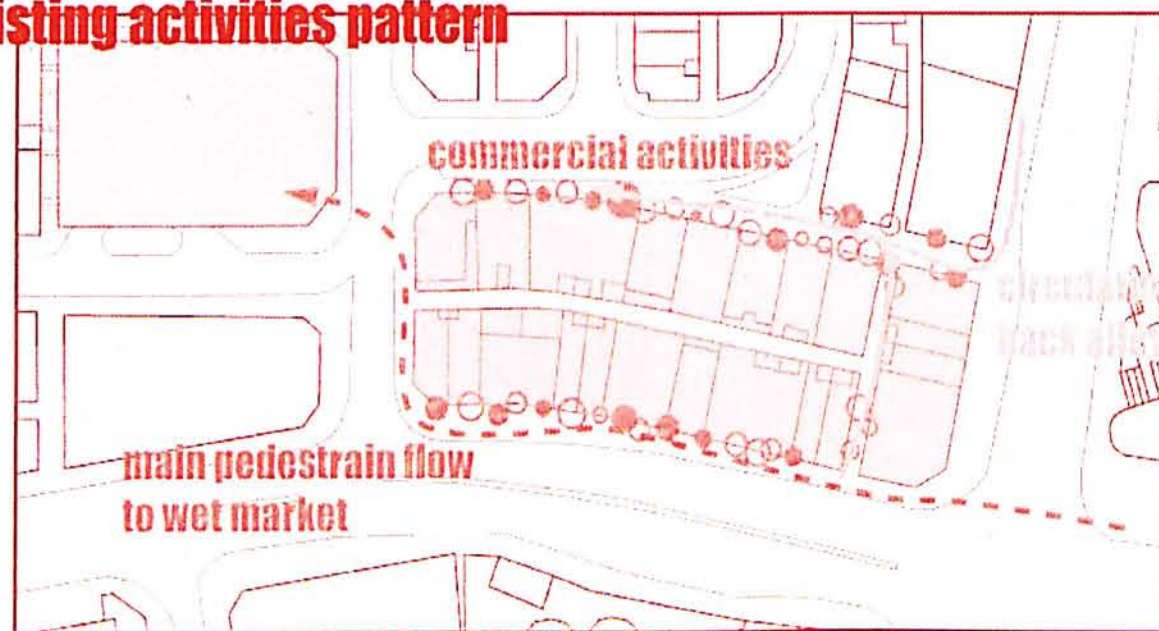


**(macro):**  
**between neighborhood**

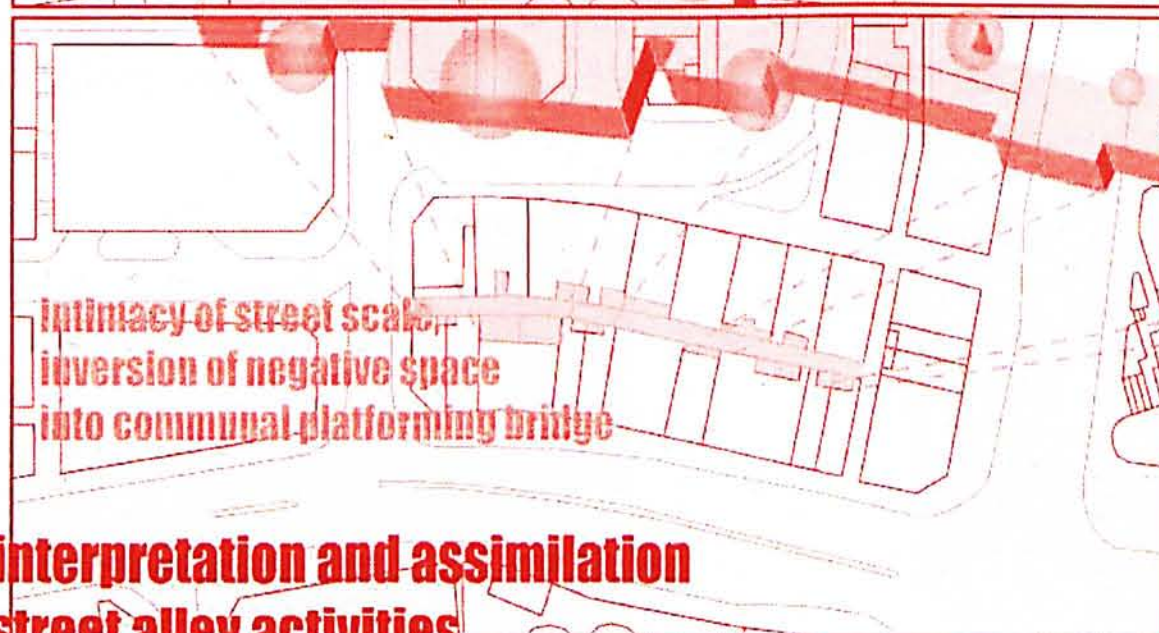
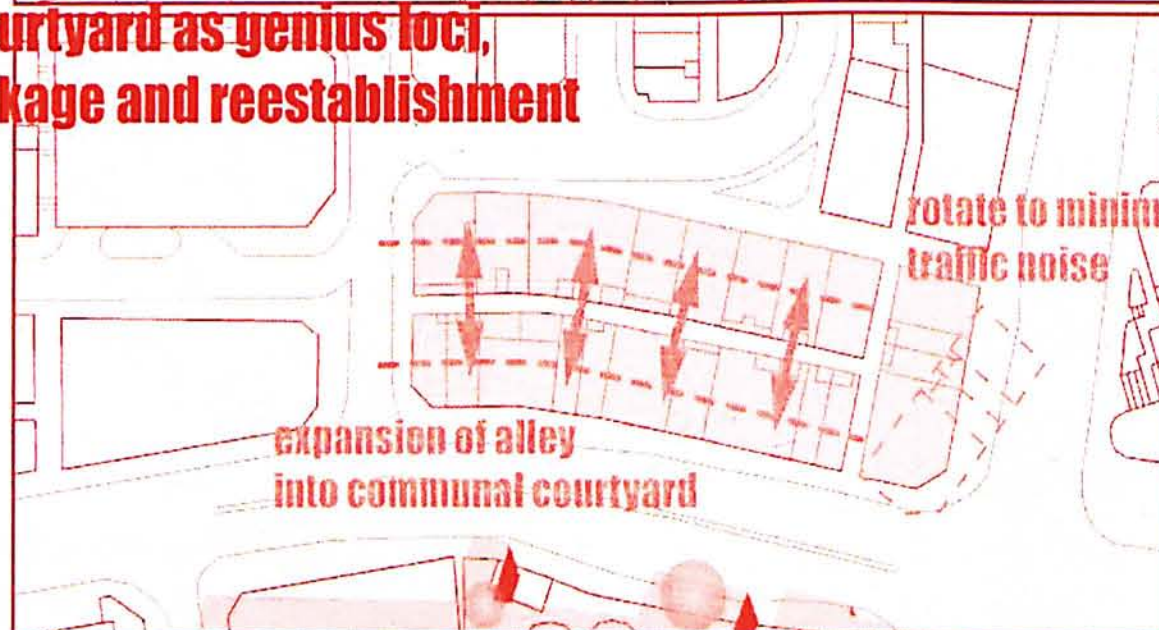




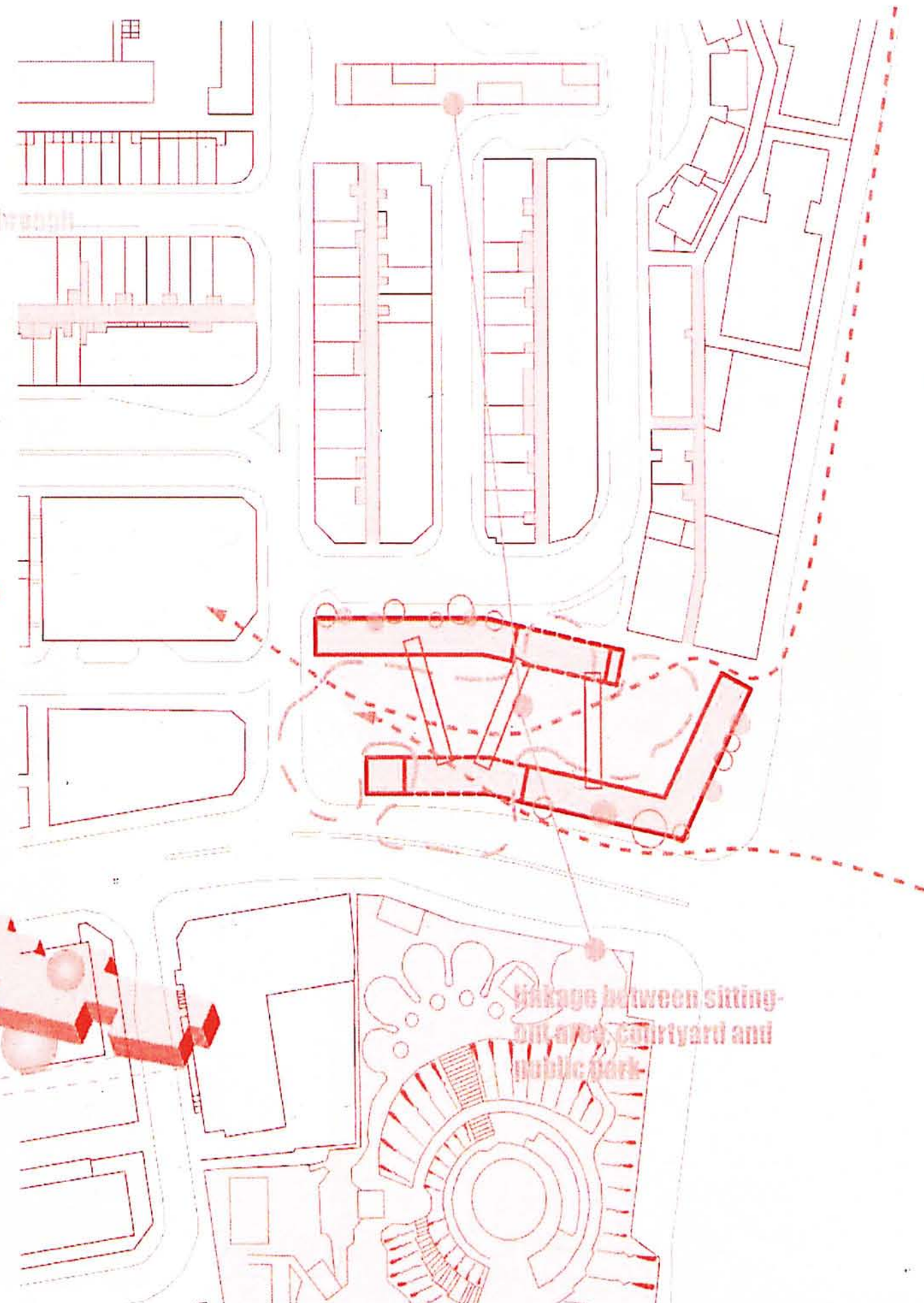
## Existing activities pattern



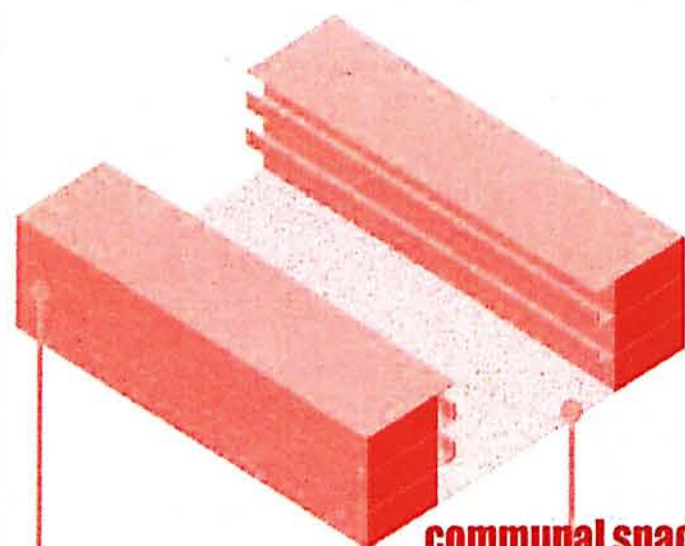
## Courtyard as genius loci, linkage and reestablishment



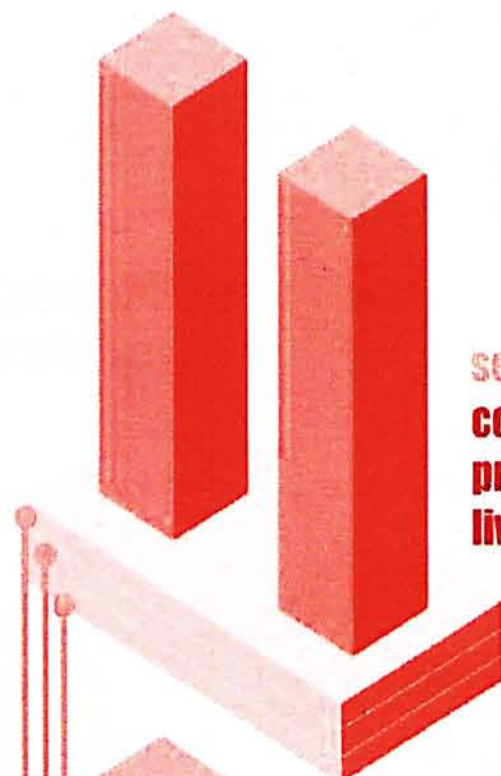
## Reinterpretation and assimilation of street alley activities







communal space as  
central courtyard



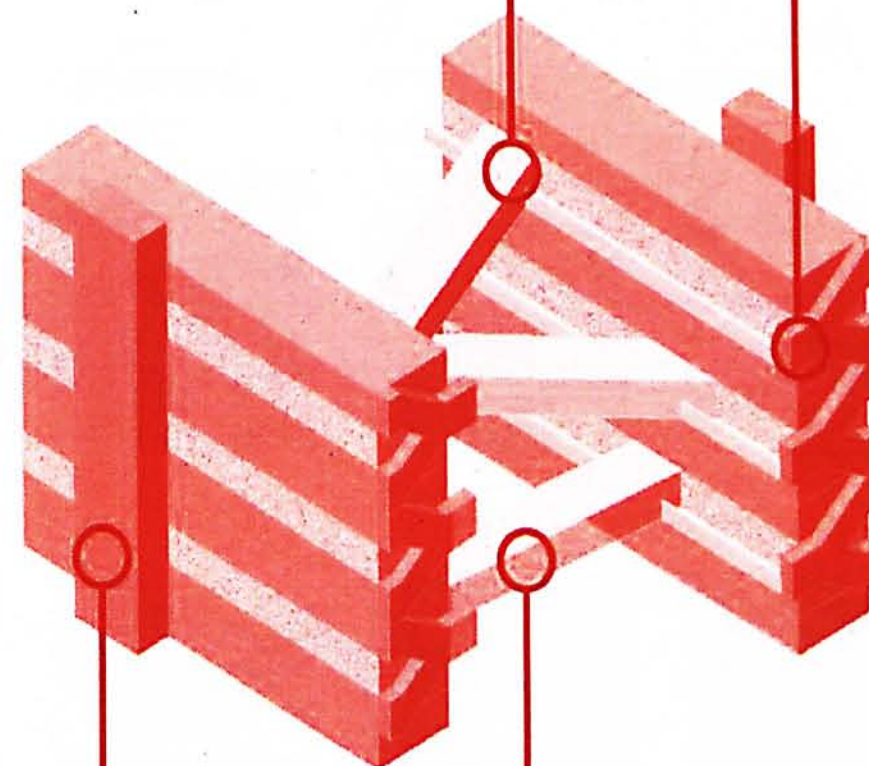
segregated  
communal  
program with  
living module



assimilation of  
communal program  
into platforming  
bridge linking  
separate living  
modules



bring in communal  
space in between  
level in a  
high rise context



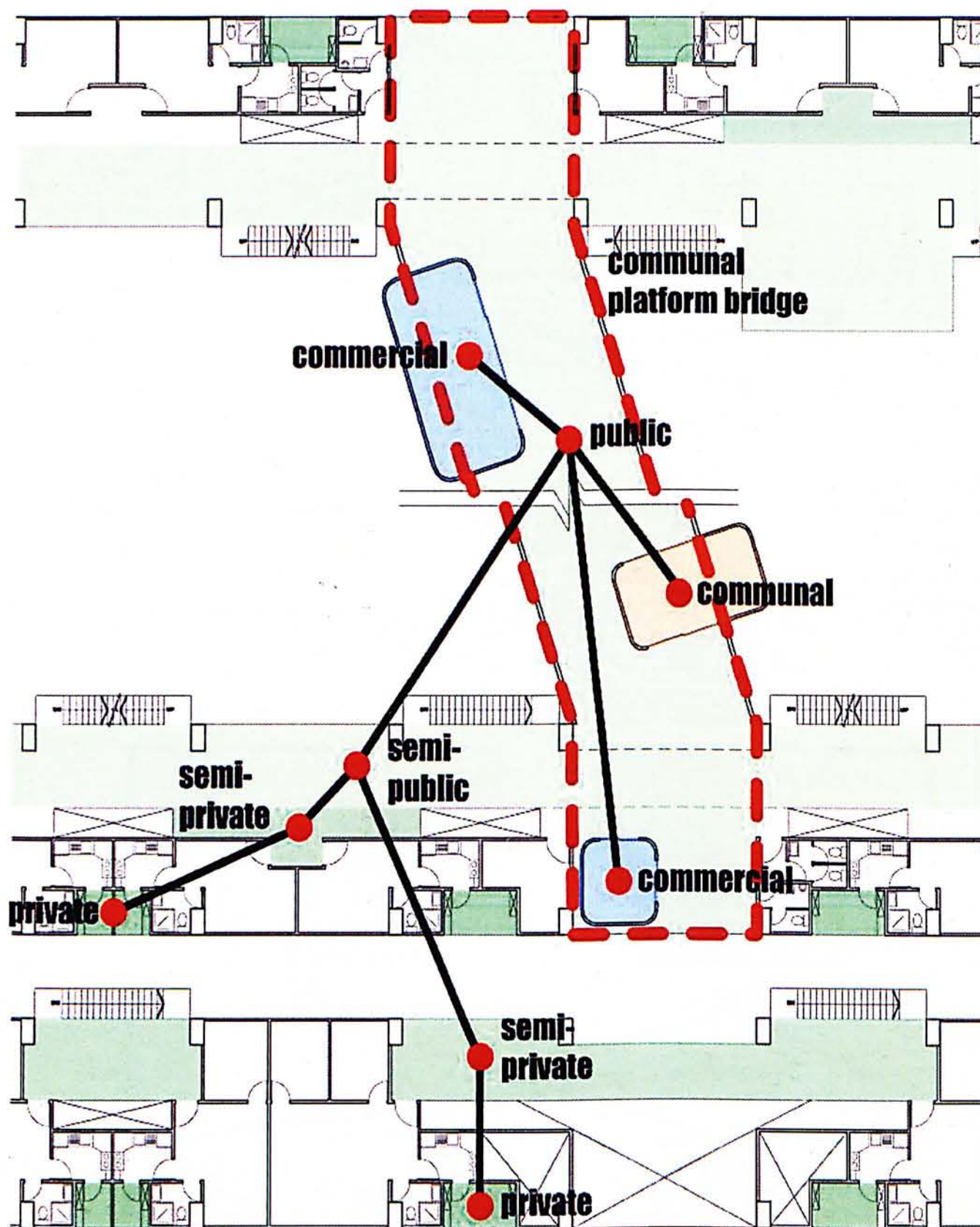
skip-floor elevator system

amalgamation between  
public space of different  
hierarchy and program

external open stair access  
to one floor up and down  
of the corridor floor

visual relation between  
platforming bridge and  
central courtyard





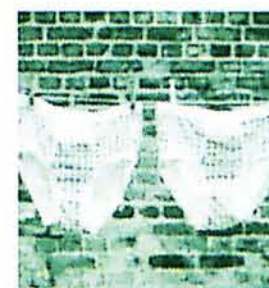
The large width of the corridor is justified for the good of nourishing a **communal bonding** and it is also beneficial to elderly. The low efficiency caused is balanced by the use of skip floor which reduces corridor area and the added amenity of **double exposure** for those flats on the non-corridor floor. Community facilities would be provided every third floor where pp can reach **without going outdoors**. In addition to the facilities, there will also be space for studio unit and are suitable for elderly couple or single elderly who cannot be expected to use the stair.



**barber shop**



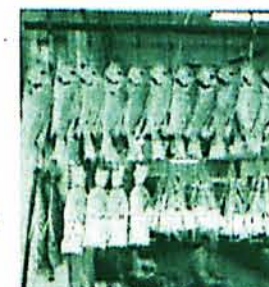
**gathering**



**clothes drying**



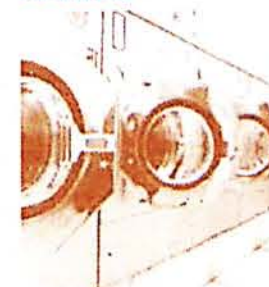
**herbs shop**



**preserved food**



**health care center**



**self served laundry**



**cafe**



**gardening**



**dry market**



**mahjong**



**child care center**



**organic farm**



**chess**



**fitness center**



**chinese tea house**



**game**



**animal corner**



**playground**



**tai chi**



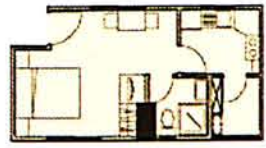
studio flat

1 bedrm unit

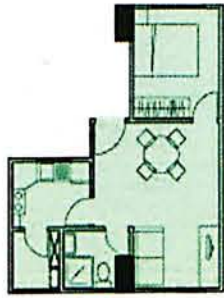
2 bedrm unit

3 bedrm unit

2 family unit



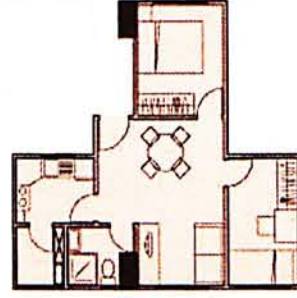
A1s



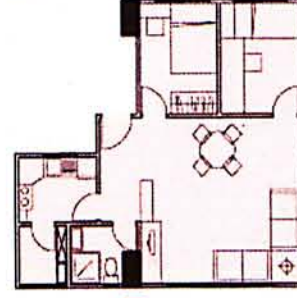
B1b



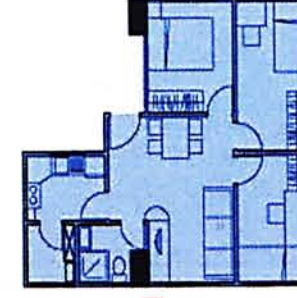
C2b



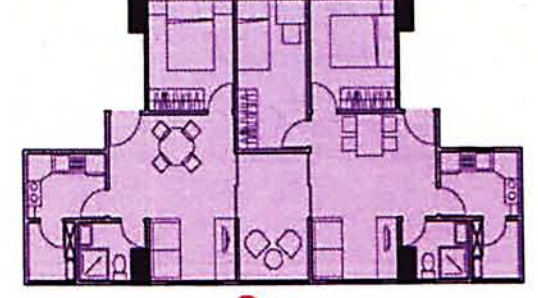
D2b



E2b



F3b



G3b

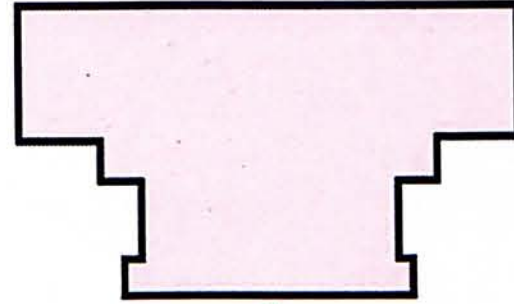
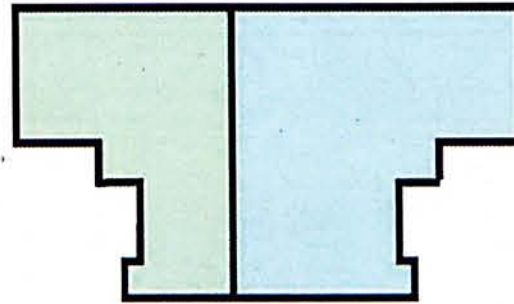
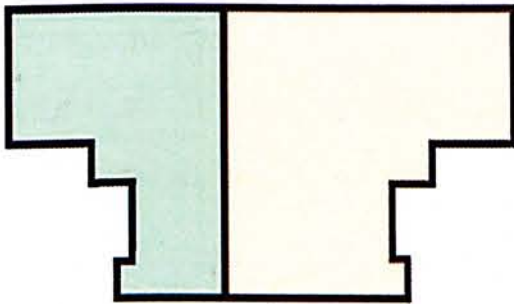
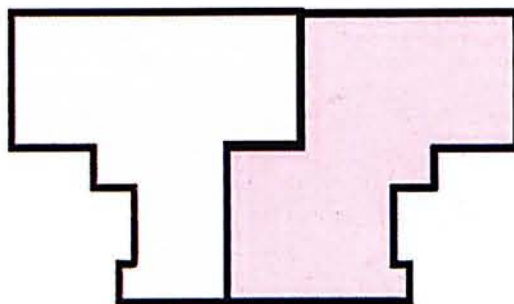
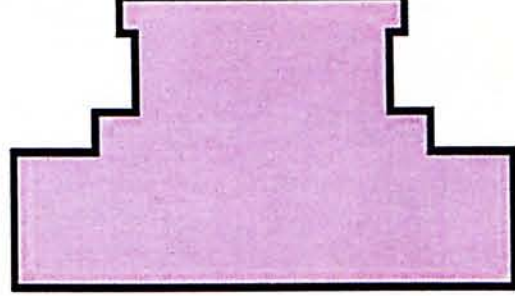
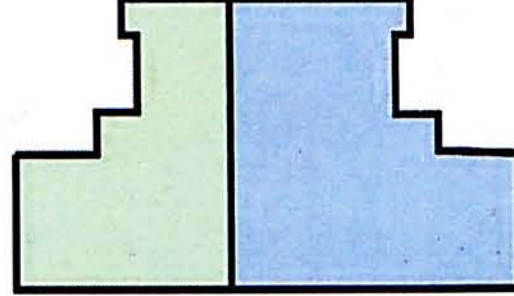
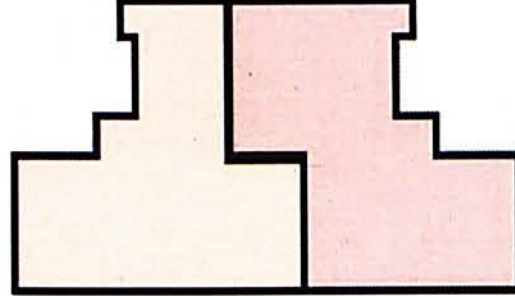
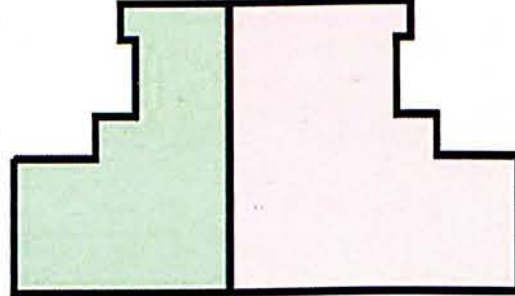
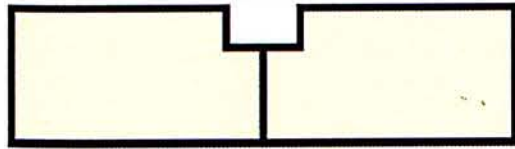
T-0

T-3

T-1

T-3

T-4



t-1

t-2

t-3

t-4

H1b

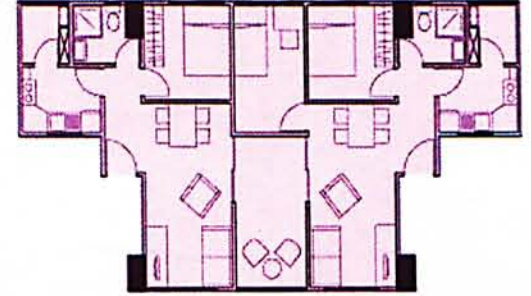
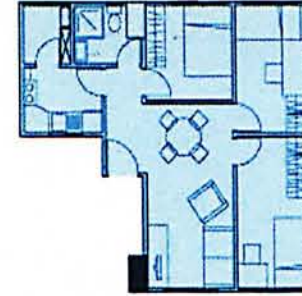
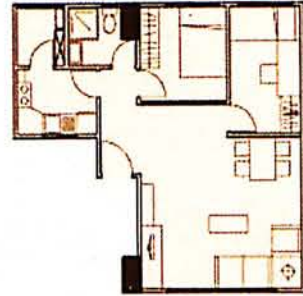
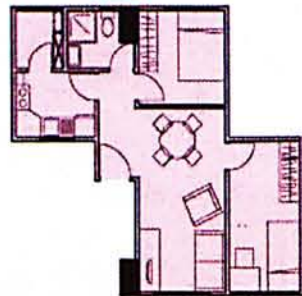
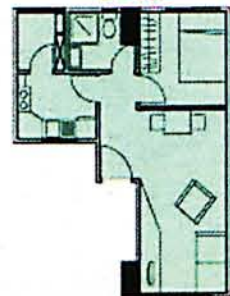
I2b

J2b

K2b

L3b

M3b



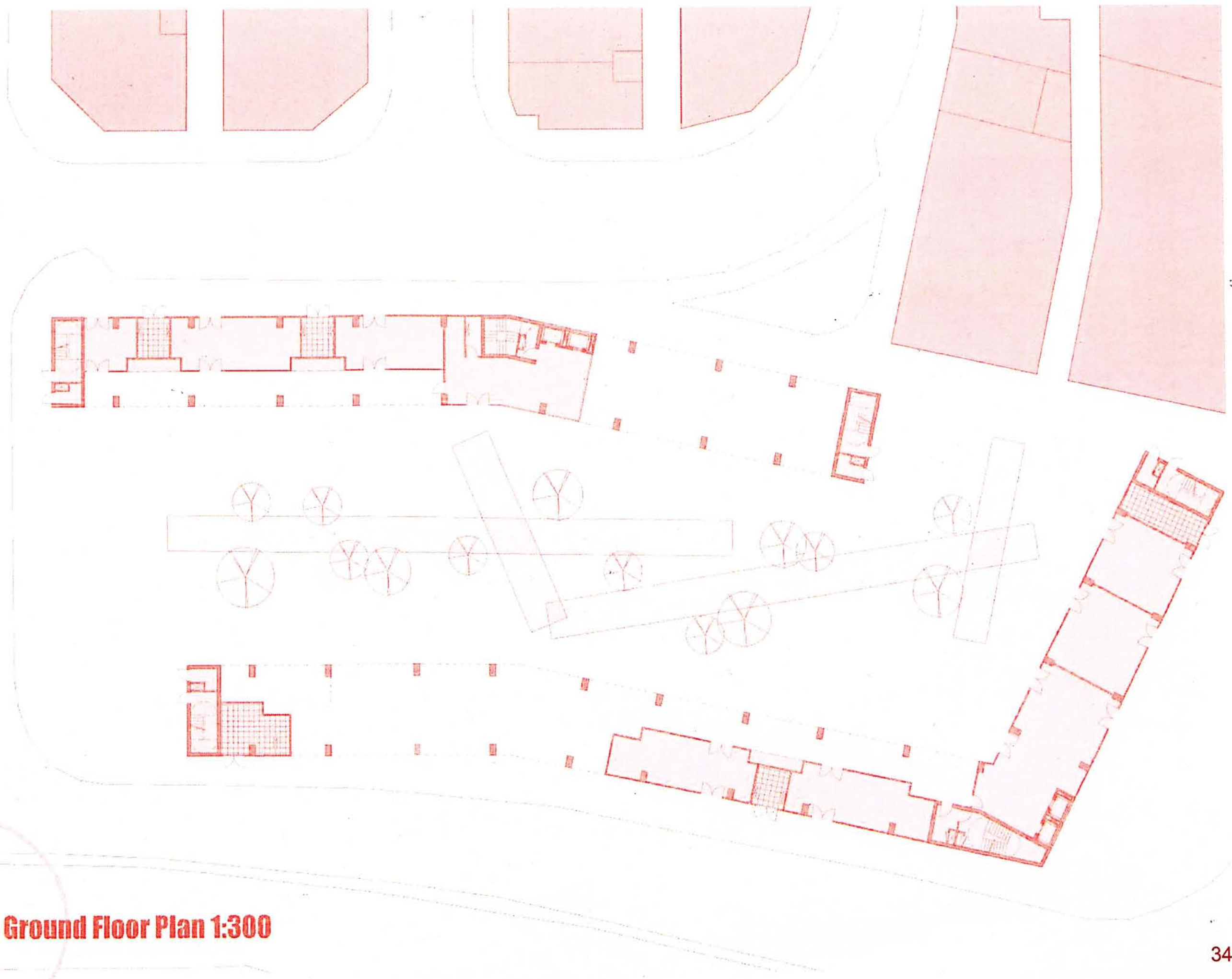
1 bedrm unit

2 bedrm unit

3 bedrm unit

2 family unit





**Ground Floor Plan 1:300**





N

**First Floor Plan 1:300**





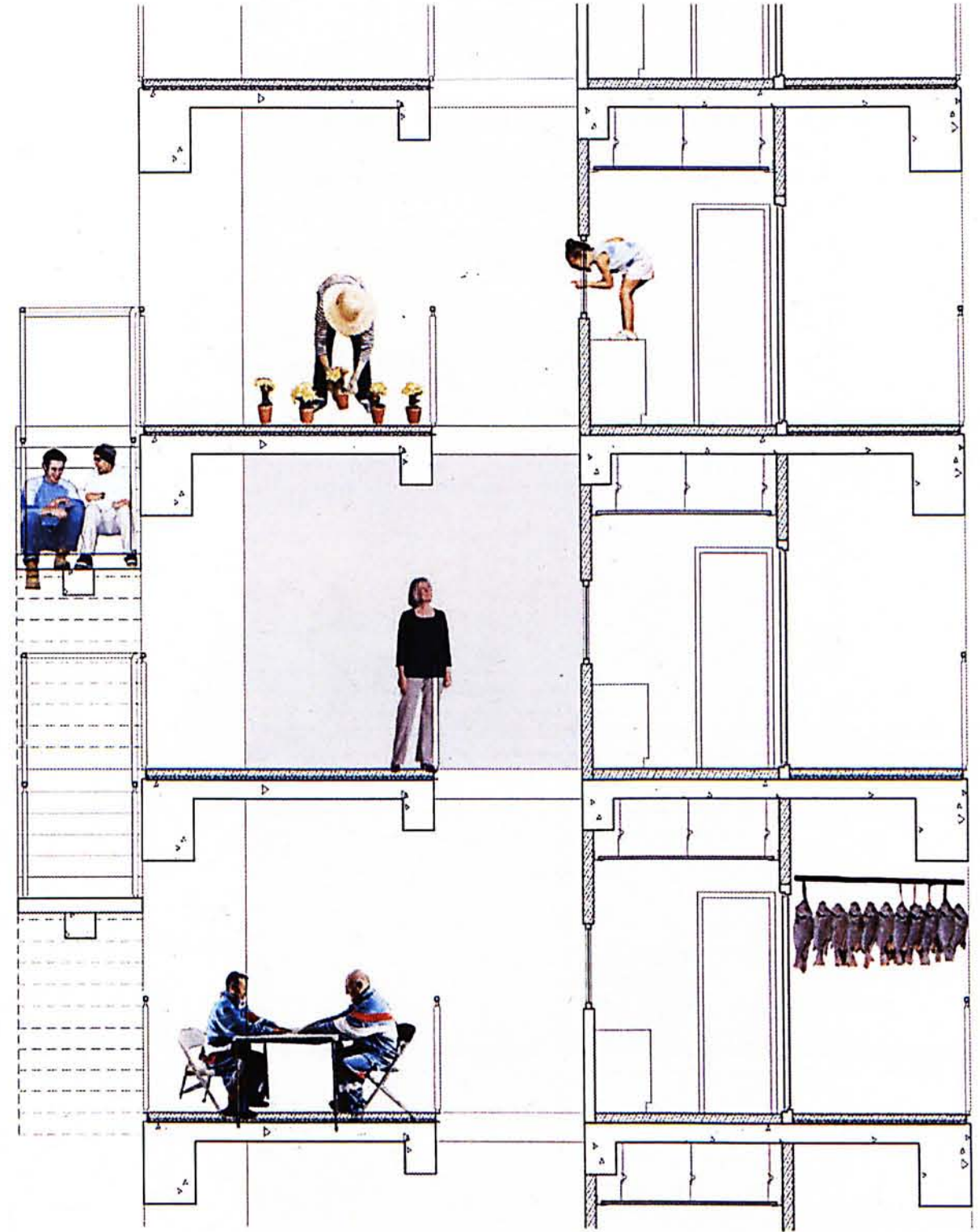
**Second Floor Plan 1:300**





**Third Floor Plan 1:300**





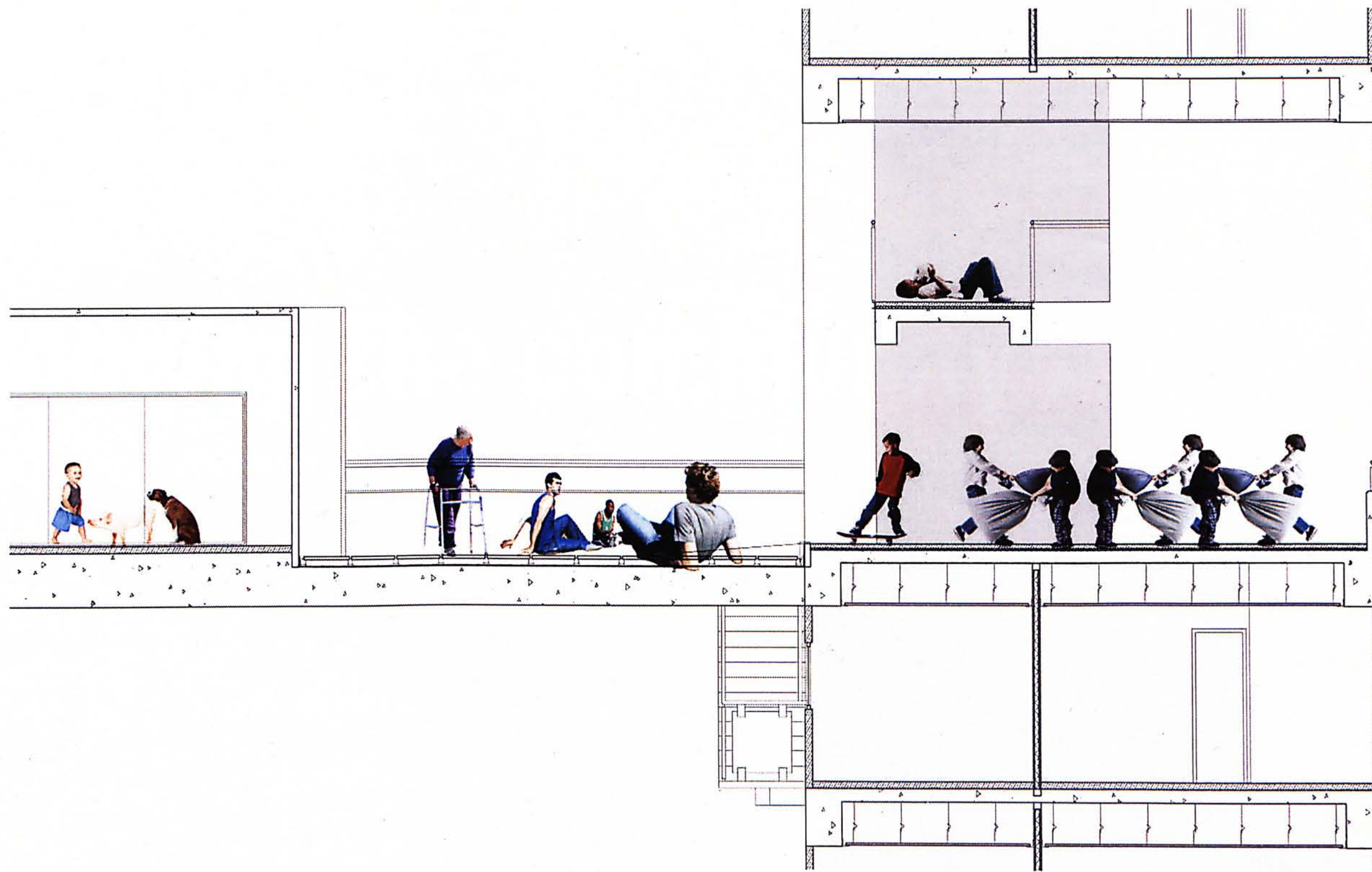
Detailed section through semi-private garden 1:50





Detailed section through deck 1:50





Detailed section through platforming bridge and adjoining lobby 1:50

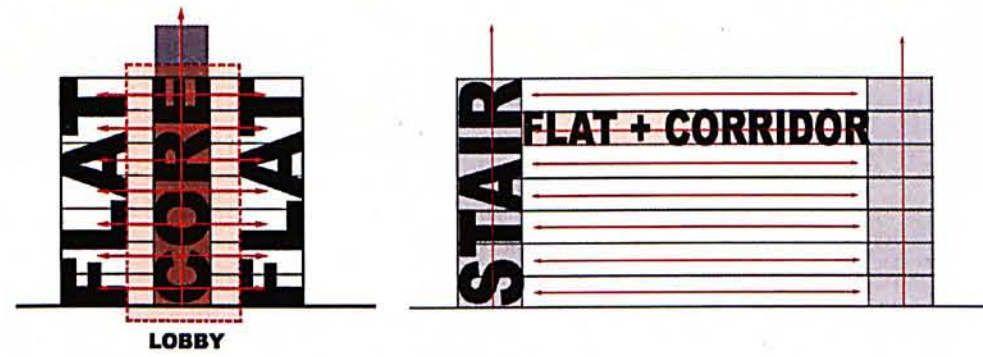


# Bridging the community 联社系邻

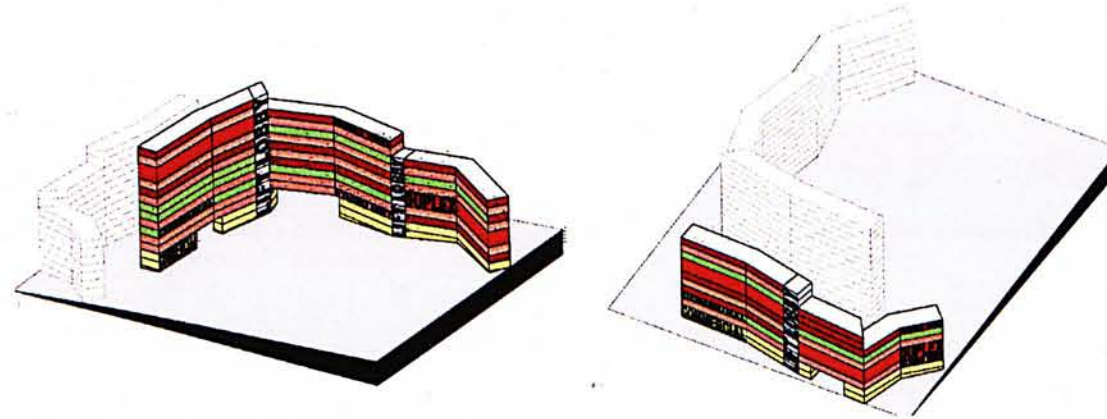
this is a city with no history, this is a city with no present, this is a city with no future/  
you talk about the GFA, you talk about the plot ratio, you talk about the profits return,  
but you do not talk about the concept/ Van Gogh drew the Starry Night, but he did not  
put an explanation at the bottom/ "you have eyes but you don't see, you have ears but  
you don't listen"(Mathew 13:15)/ this is about people, this is about living, this is about  
something we long forgotten - NEIGHBORHOOD

这是没有历史的城市，这是没有现在的城市，这是没有将来的城市 /  
您爱谈论总体建筑面积，您爱谈论地积比率，您爱谈论赢利回报，但  
您不爱谈论设计概念 / 凡高画了《星夜》，但是他从未有在画里写下  
解释 / 『您们听是要听见，却不明白；看是要看见，却不知道』马太  
福音十三章十五节 / 这是关于人们的，这是关于居住的，这是关于一  
件我们遗忘了的事 - 邻里

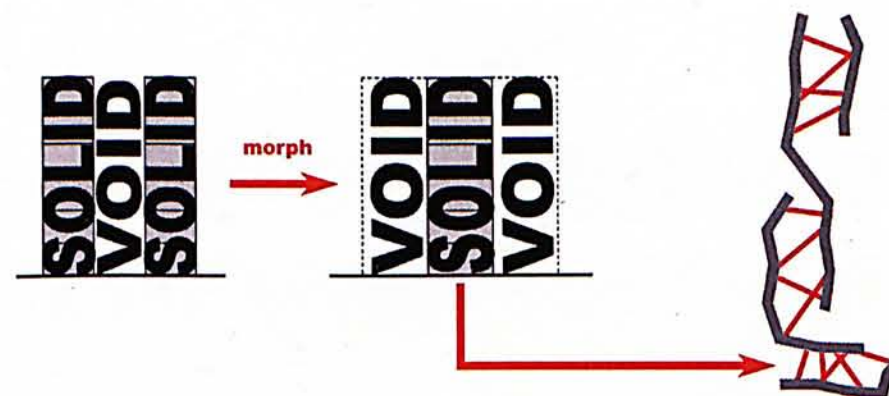




Access approach

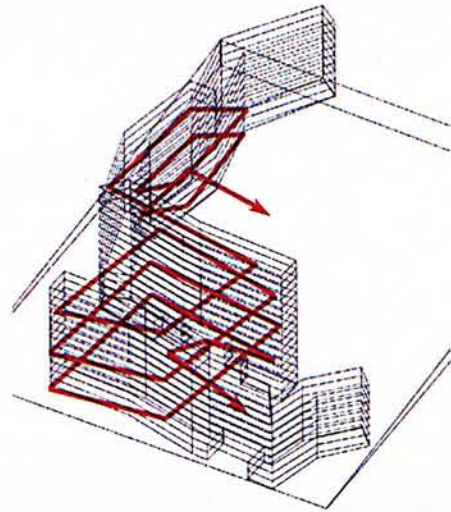


Mixed unit types + units distribution pattern

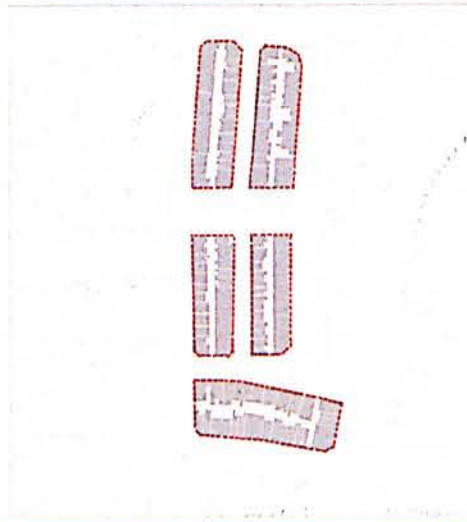


Insertion of negative space to sky deck

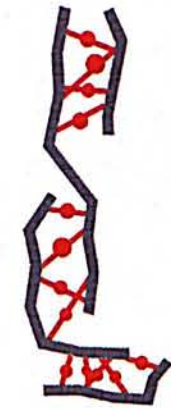




Looping street path linking different courtyard through the whole development



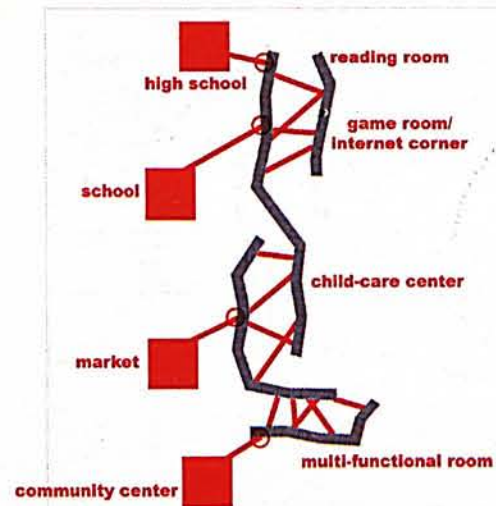
Redevelopment takes up existing footprint



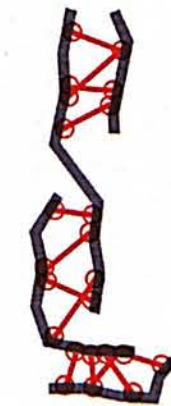
Small-scale commercial programs into bridge



Connected ground floor space



Relation of community program

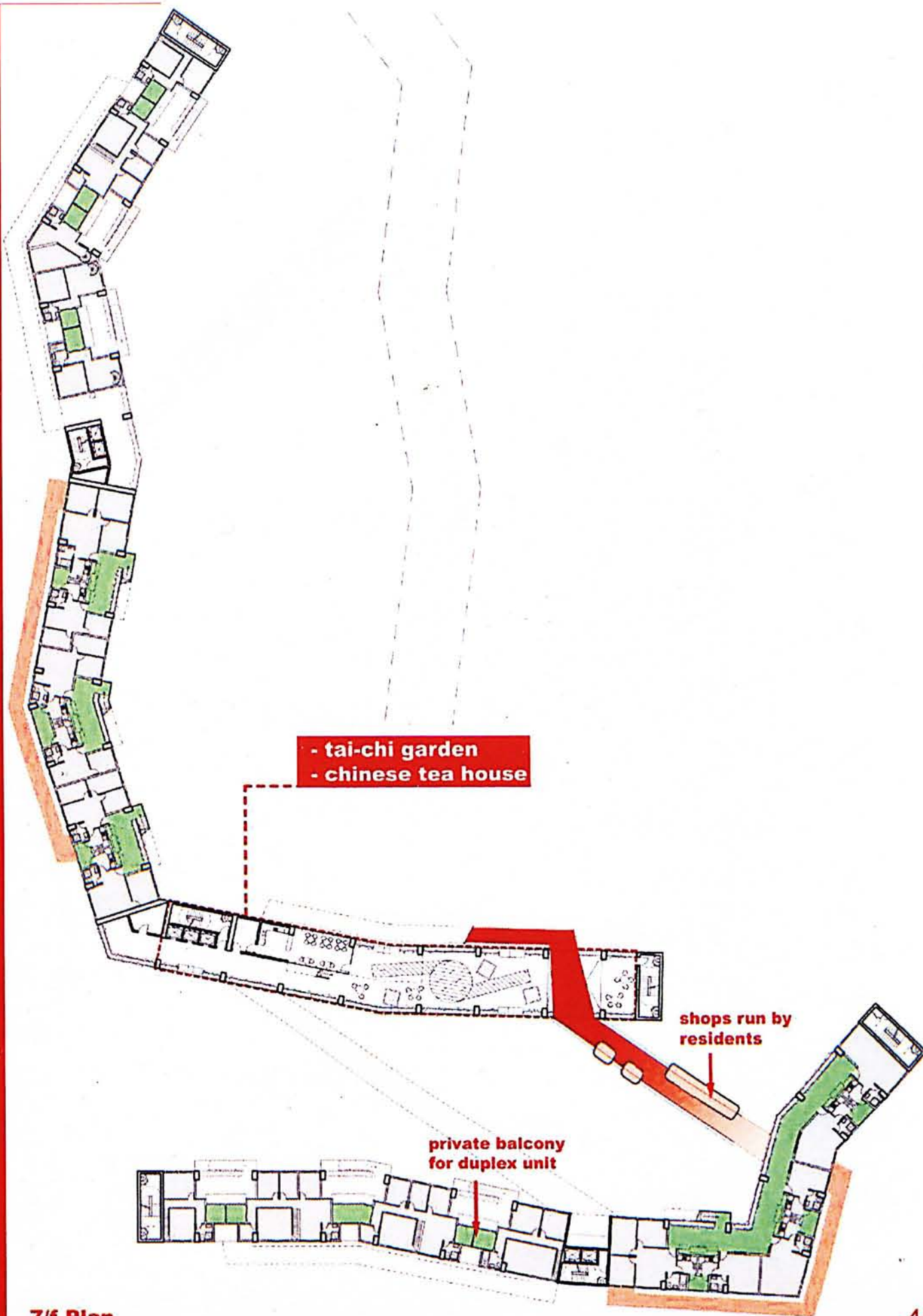


Community program at intersection point









7/f Plan



service balcony  
shared by 2 units

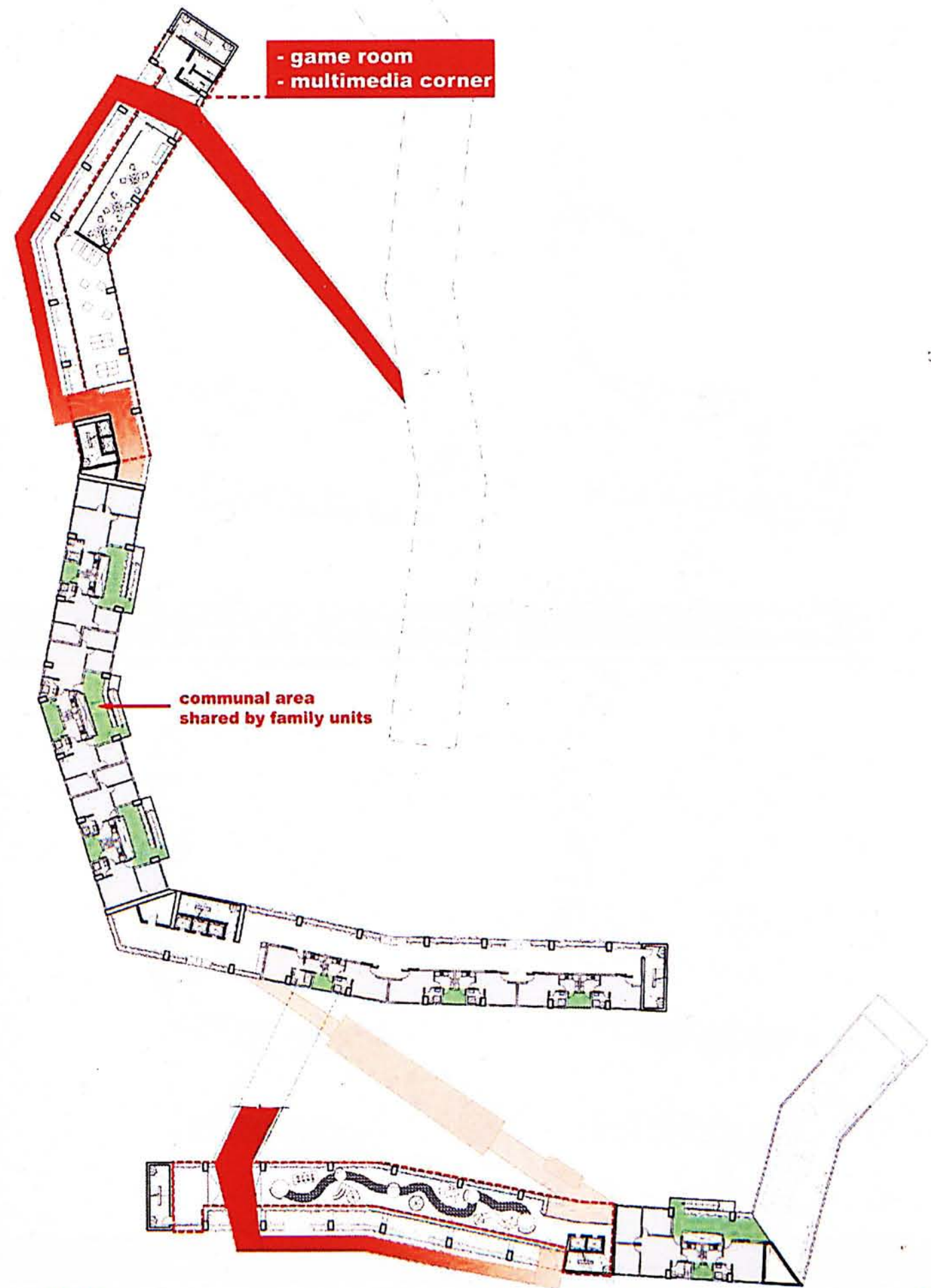
reading lounge

bridge linking  
2 blocks

8/f Plan

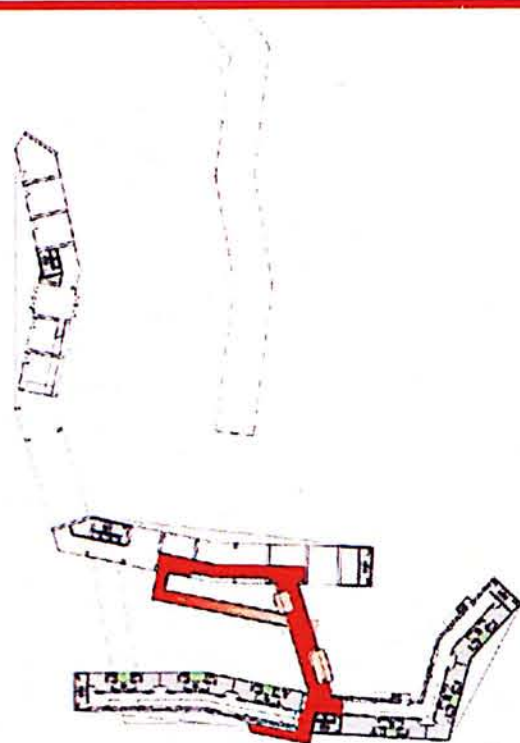
disabled unit locate  
adjacent to lift lobby





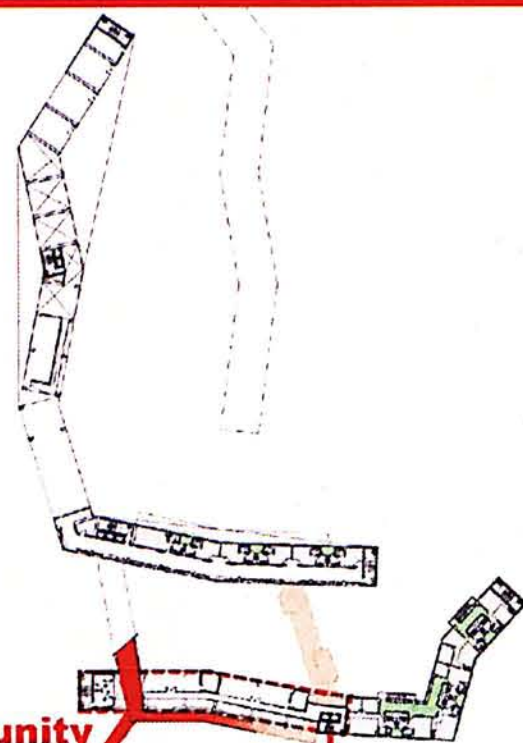
9/f Plan





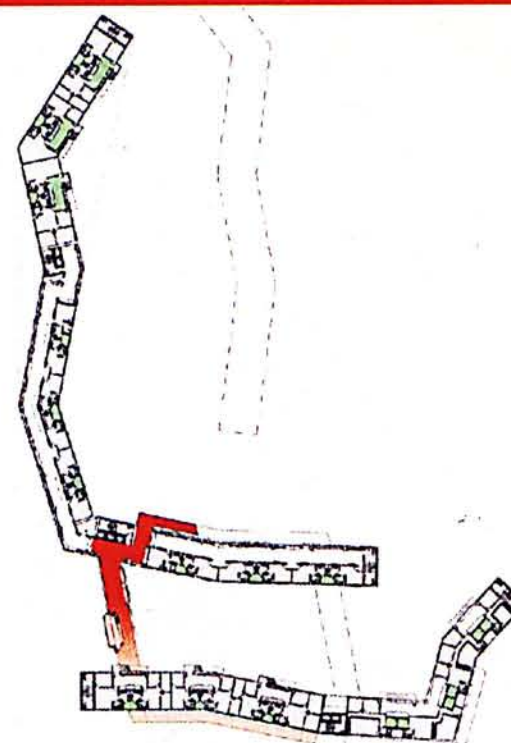
2/f Plan

to community  
center

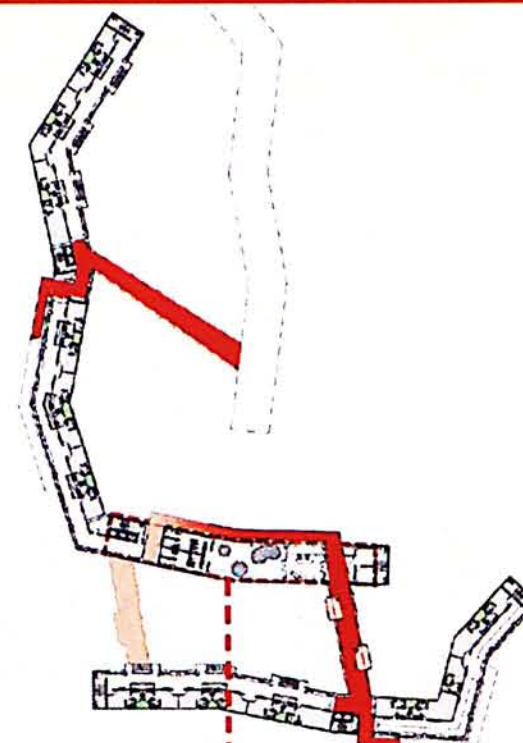


3/f Plan

multi-purpose room



4/f Plan



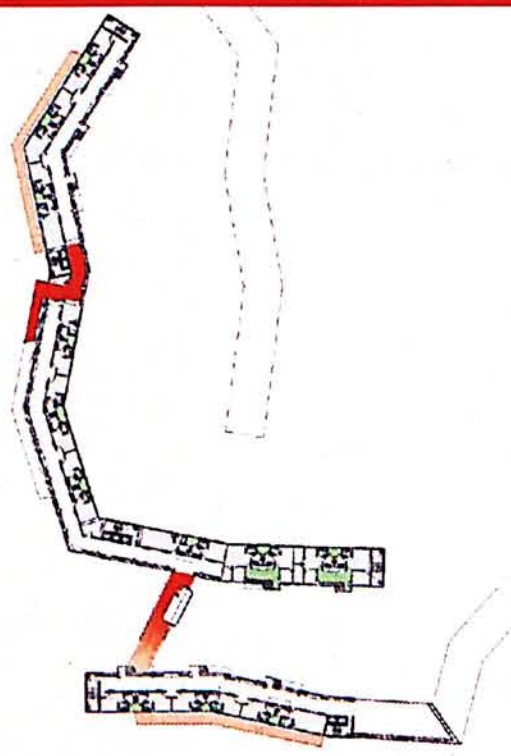
5/f Plan

hot-water bath + sauna

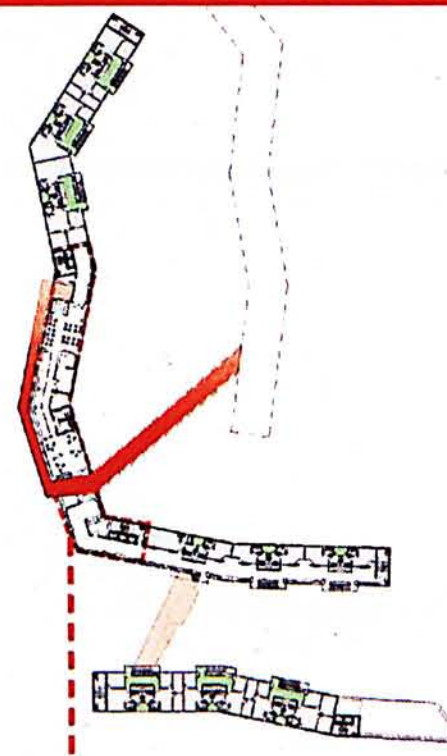


6/f Plan

child care center + nursery

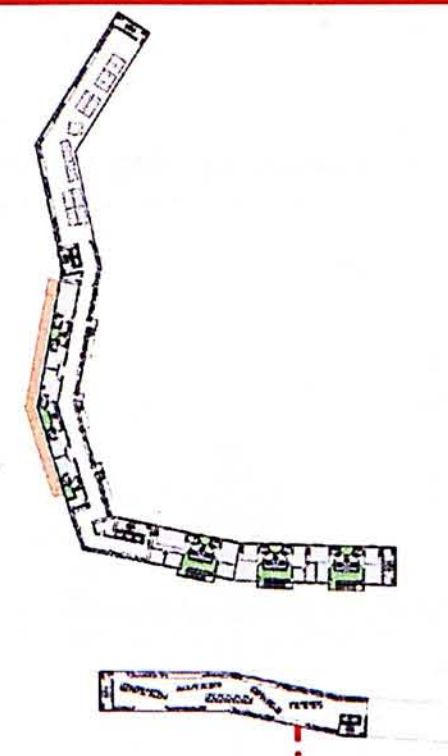


10/f Plan



11/f Plan

organic food home-made cafe



12/f Plan

roof garden

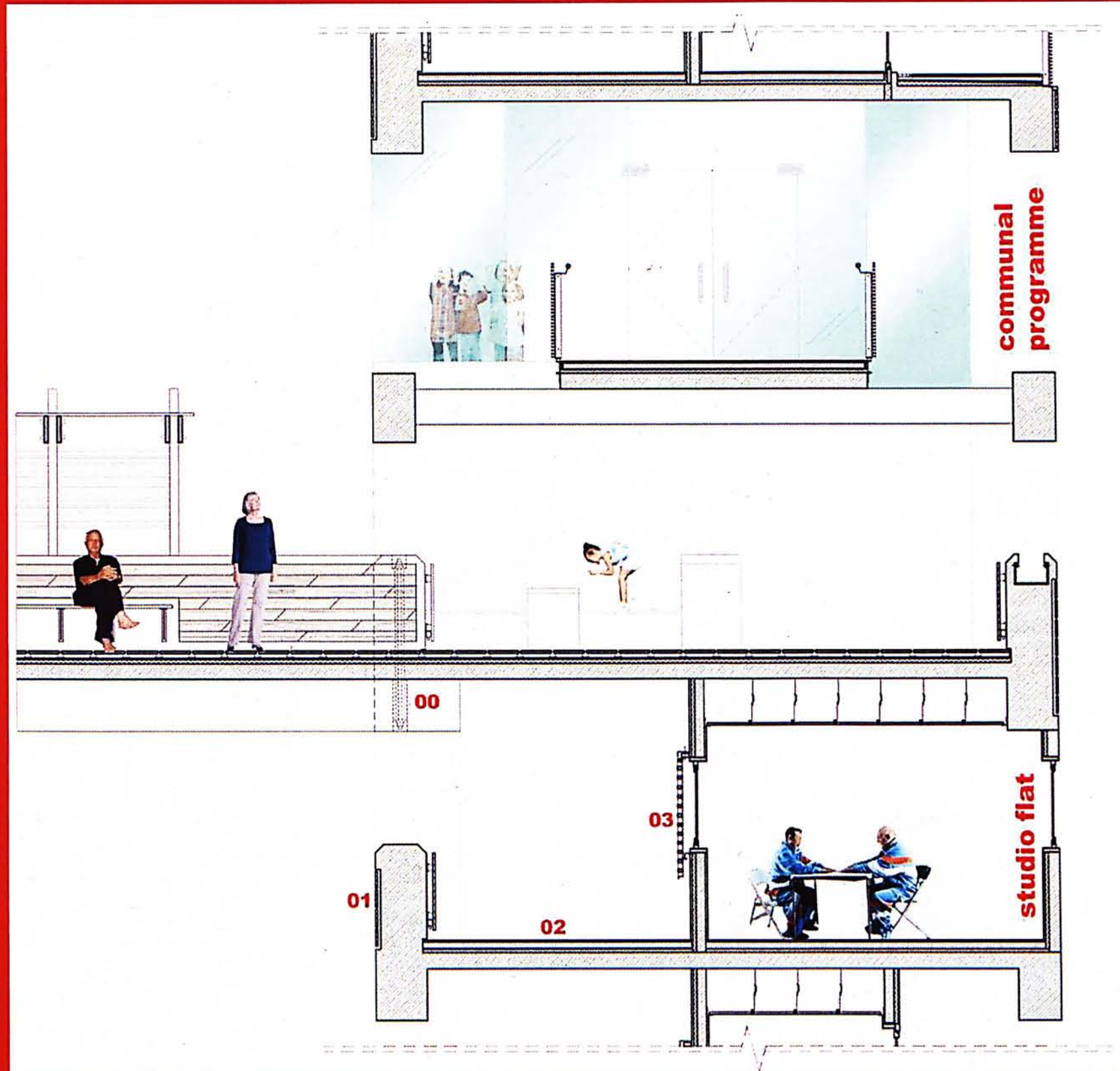


00 - suspended fixing in upstand planter with threaded rod, nuts and washers

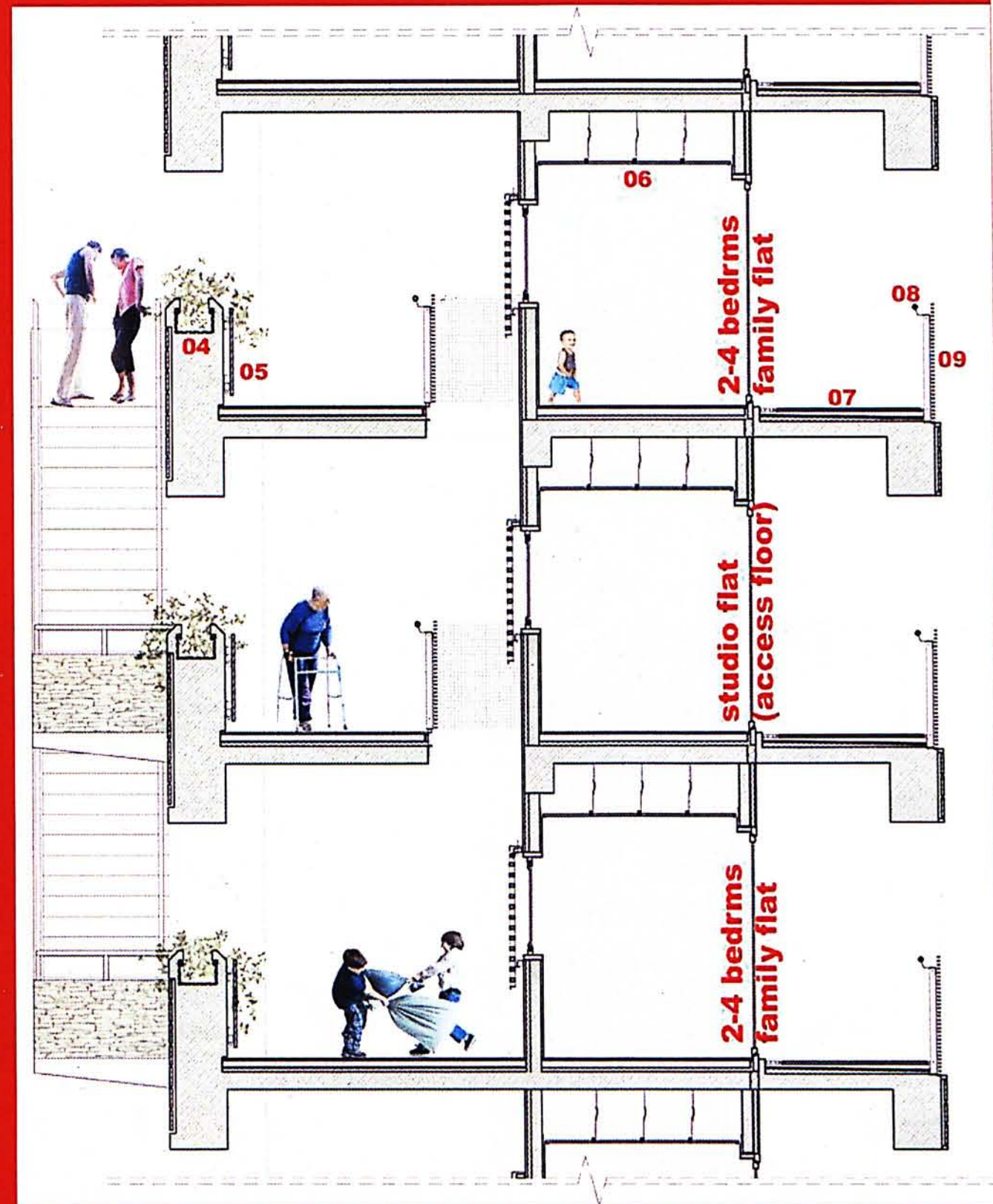
01 - 30mm honed French limestone

02 - 600/600/20mm terrazzo tiles  
- 20mm screeding  
- polyethene waterproofing  
- 50mm thermal insulation

03 - movable larch slats louvre panel in steel channel with roller track







04 - multilayer bituminous seal in planter

05 - timber cladding to planting box with indirect lighting

06 - 600/600/20mm gypsum board suspended ceiling system

07 - wood boards in angle frame  
 - waterproff seal  
 - screed laid to fall  
 - 100mm thermal insulation  
 - 180mm concrete slab

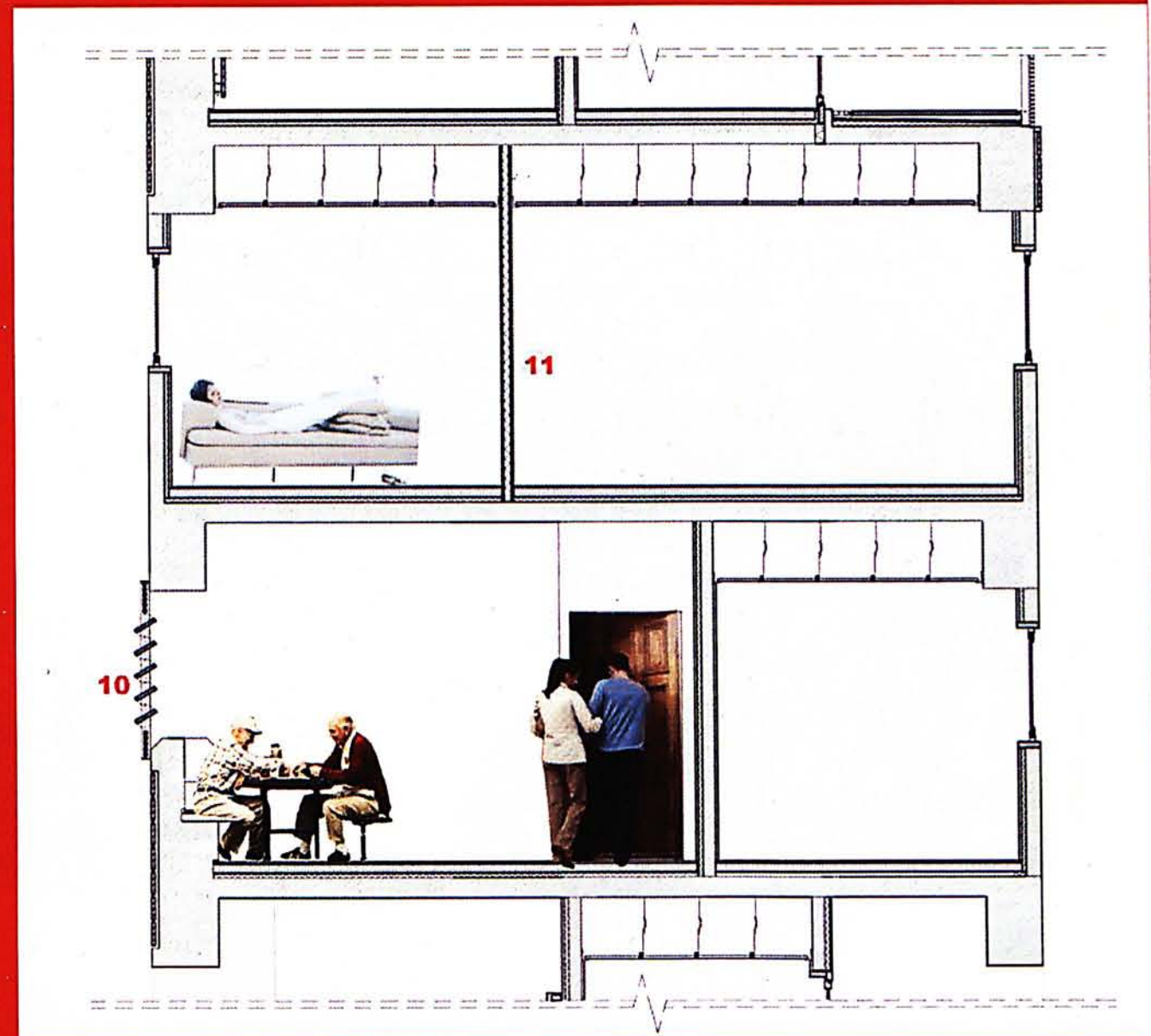
08 - balustrade post in steel angle with 50mm dia. tubular steel handrail

09 - 40/40/30mm metal grating balustrade





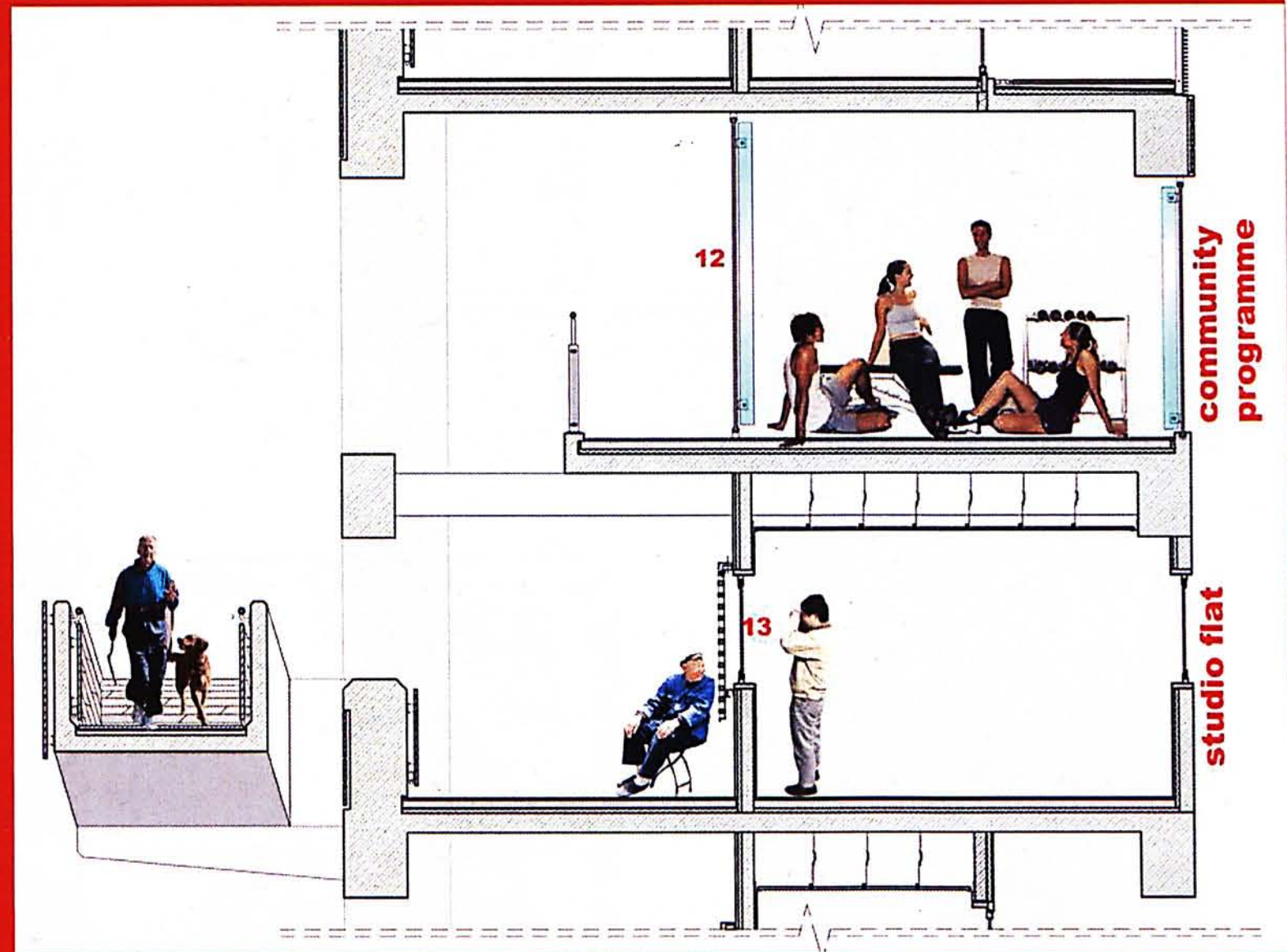




10 - manual operated movable larch louvres.

11 - 2x12.5mm plaster boards  
 - 50mm rockwool in steel stud  
 - steel channel

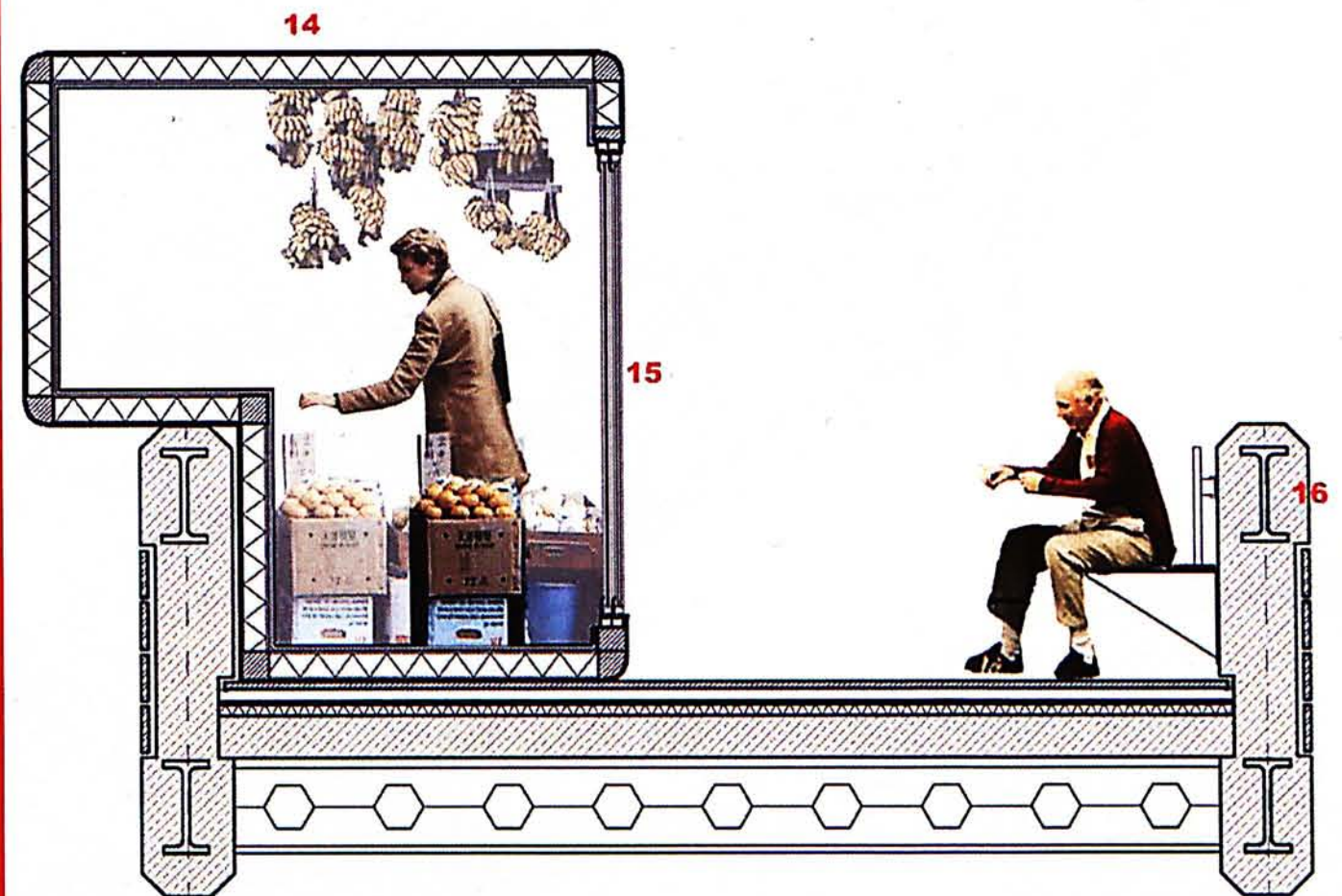
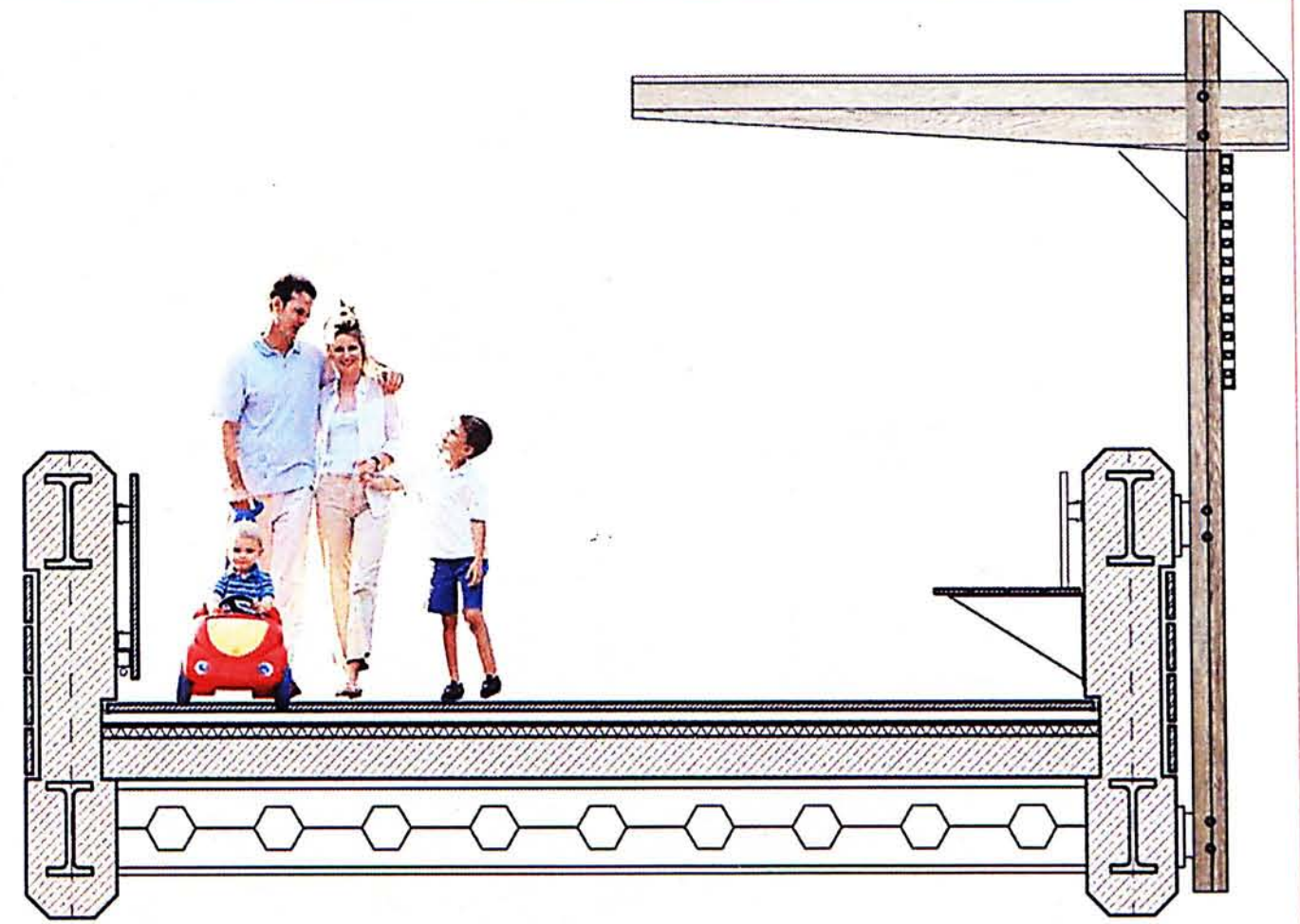




12 - glass fin fixed between angles with 12mm  
tempered clear glass

13 - 6mm toughened glass sliding window



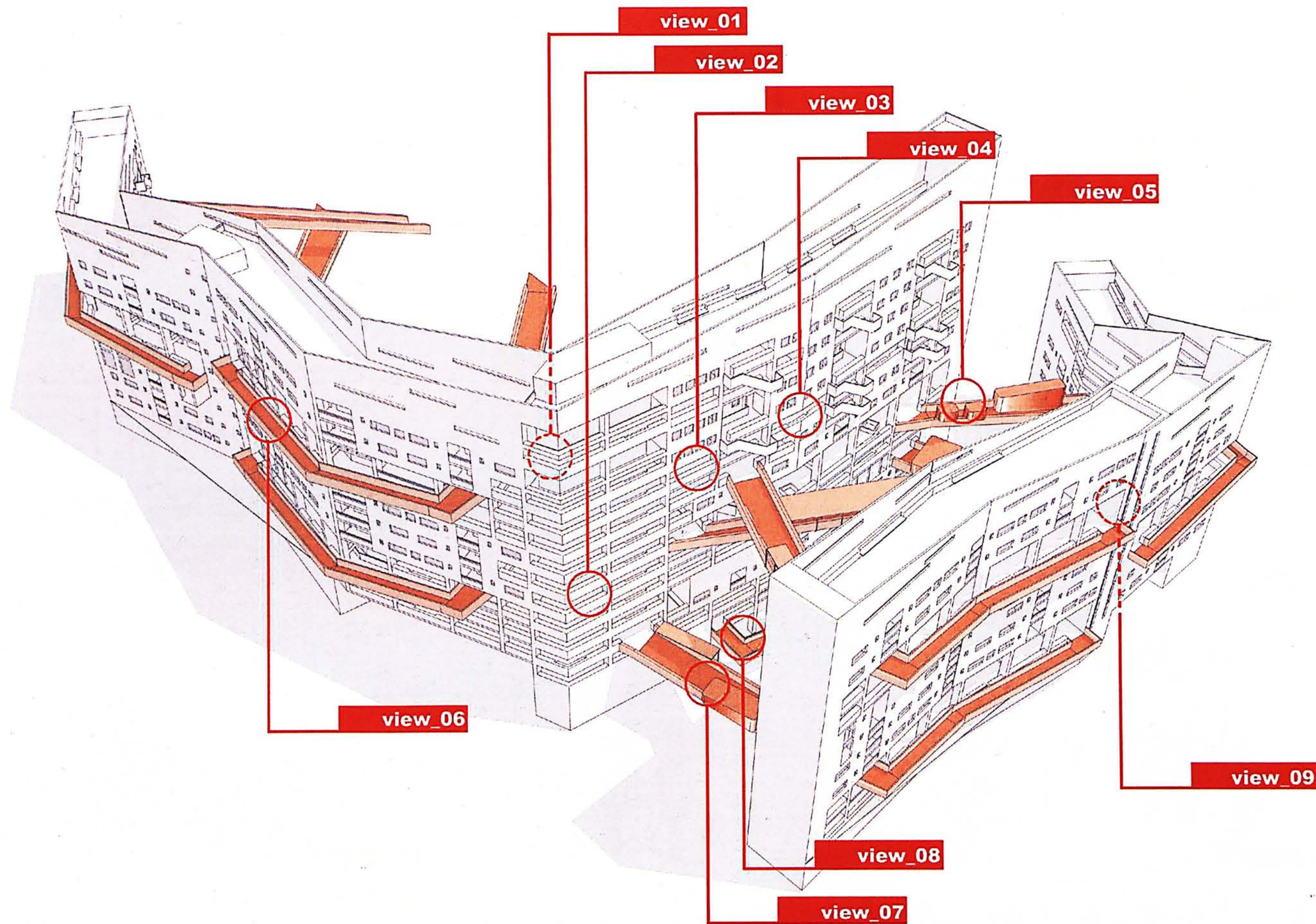


- 14 - 20mm synthetic resin-coated board
- 100mm rockwool thermal insulation
- vapour barrier

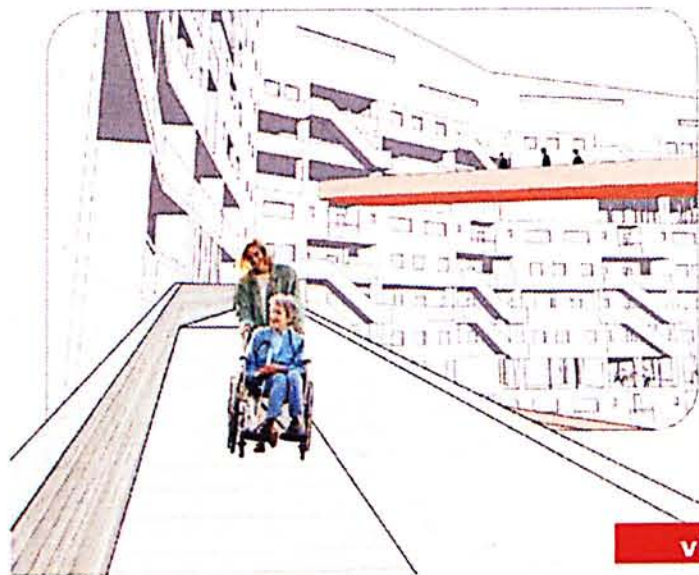
- 15 - 12mm tempered glass sliding casement

- 16 - 200x400mm I beam section forming a truss of 1500mm depth embedded in concrete planter upstand with floor deck supported by castelated I section

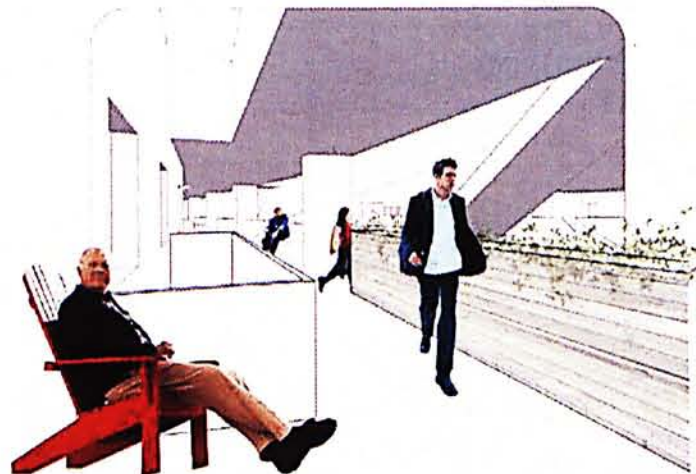




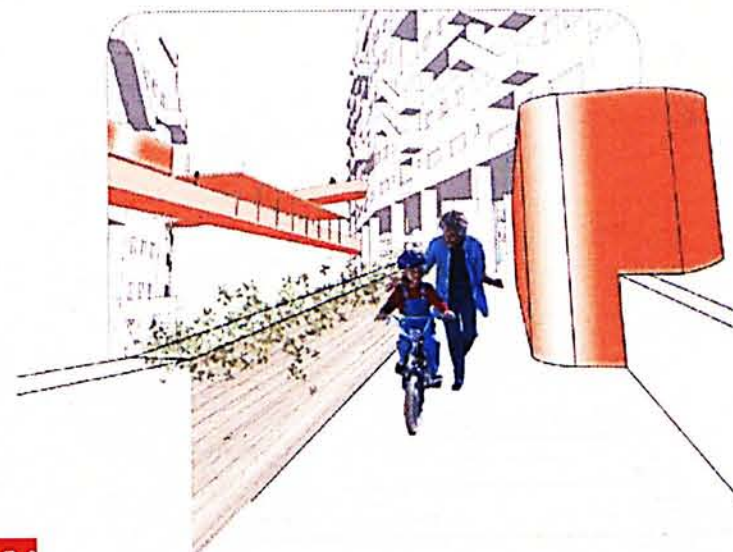




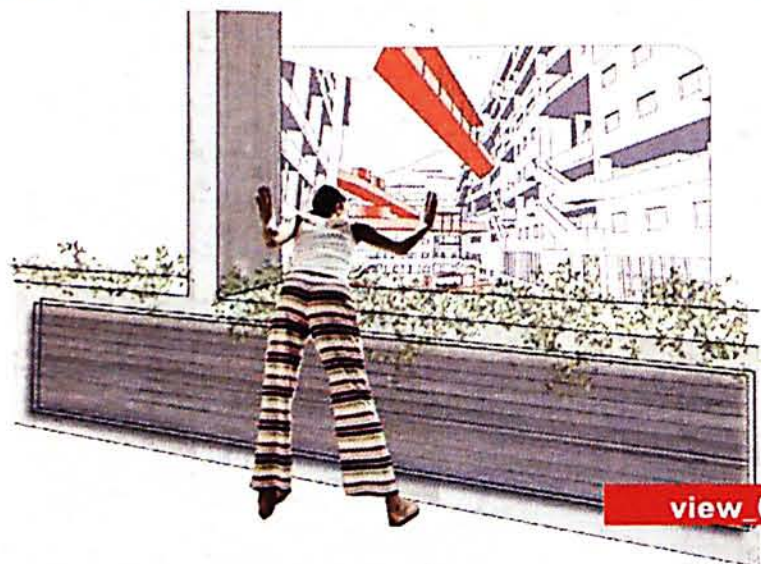
view\_01



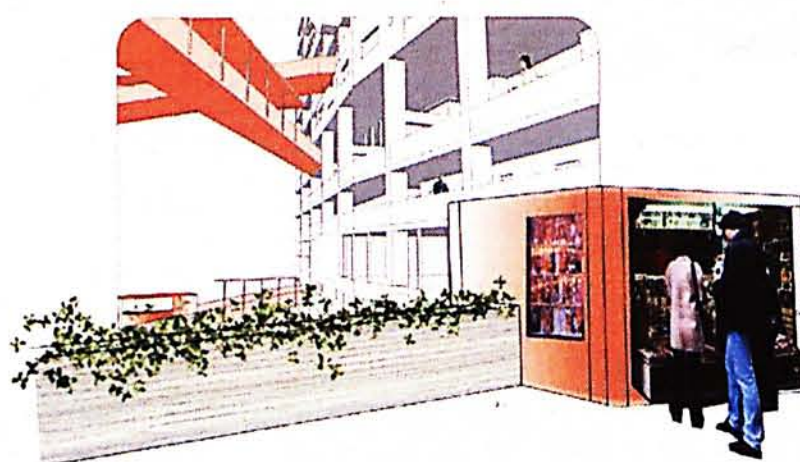
view\_04



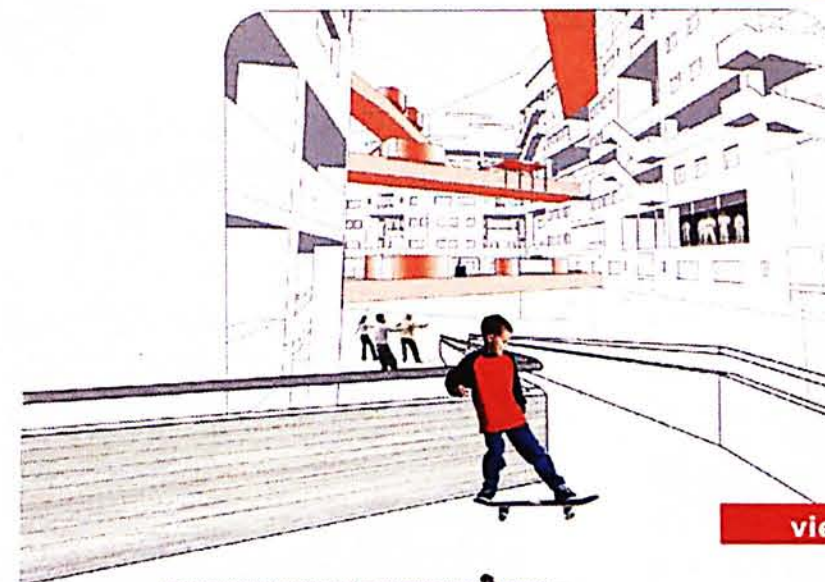
view\_07



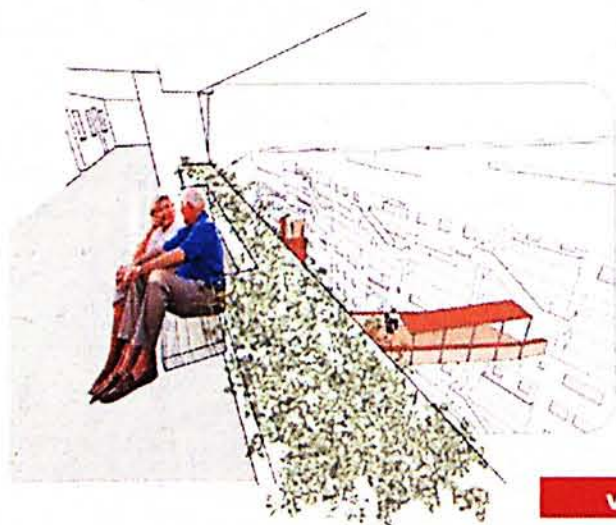
view\_02



view\_05



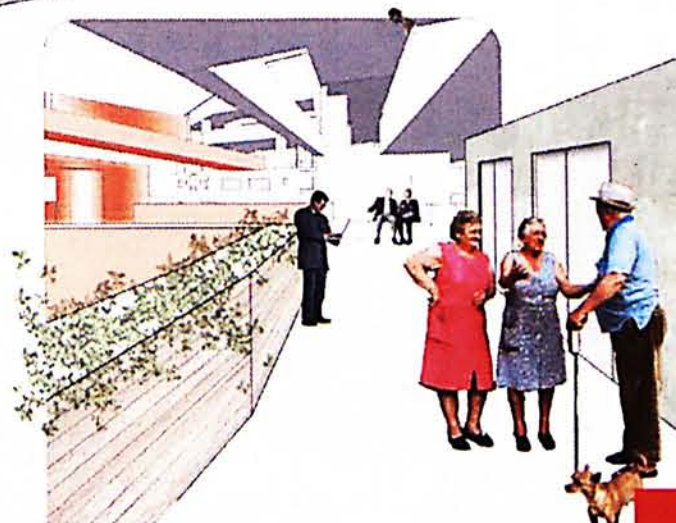
view\_08



view\_03

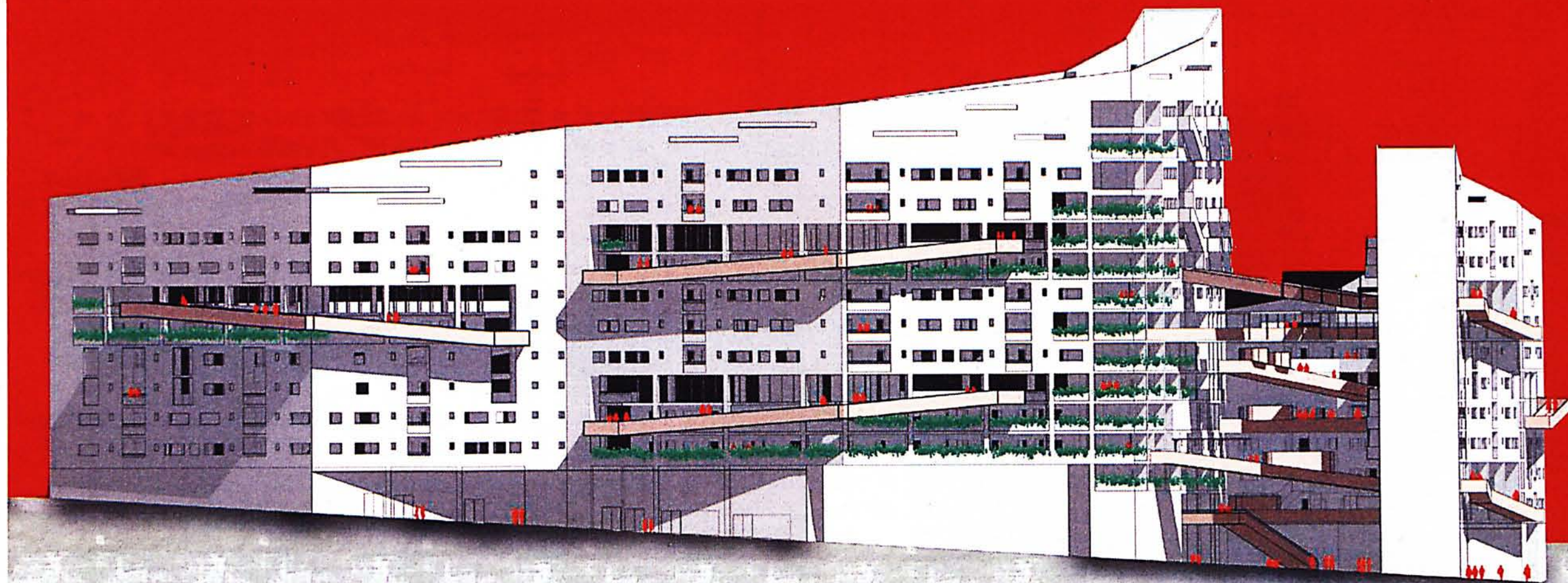


view\_06

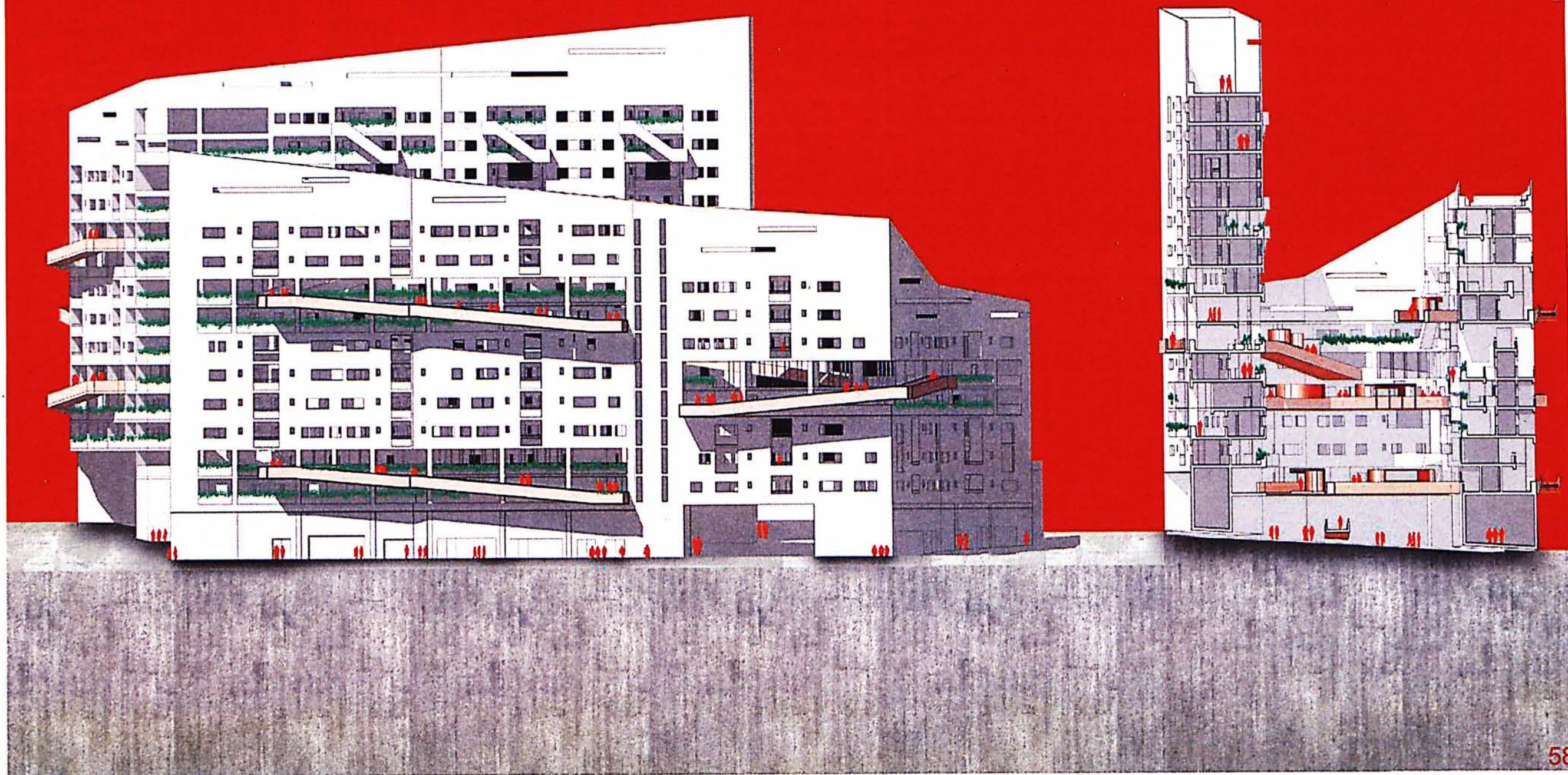


view\_09











For six years of architectural education, i realize one thing, the only bad thing about this department is... me  
Für sechs Jahre architektonische Ausbildung, ich verstehe eine Sache, die einzige schlechte Sache in dieser Abteilung bin ich  
Pour six années de formation architecturale, je réalise une chose, la seule mauvaise chose dans ce département est moi  
Durante seis años de educación como arquitecto, entiendo una cosa, la única cosa mala en este departamento es yo  
Per sei anni di allenamento architettonico, capisco una questione, sono la sola cosa cattiva in questo dipartimento

在六年建筑训练，我体会了一件事，在这个部门唯一的坏事就是我

انا وه مسقلا اذه نع دي حولا ئي سلا عيش لا بدح او عيش دان تسردن انا ، آي رام غم س دن همك بي دتلا نم تاونس آتسل

建築家になるために六年建築学を勉強して、つい気づいたことはこの学科で一番悪いのは私なんです。

# Bridging the community







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